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A critical review of the Daily Mile programme as a contributor to lifelong physical activity

Abstract

This critical paper investigates one influential post millennial initiative – the Daily Mile programme – which is designed to promote the multifarious lifelong enhancing benefits of running-based experiences. A textually orientated discourse analysis of the language used in media, policy and research related documentary sources of evidence are used to critically review the role stakeholders, academics, researchers, civil servants and key individuals played in the development of the Daily Mile programme. Analysis revealed that the Daily Mile is experiencing some difficulty in being in control of its position and development due to the complex influences of multiple stakeholders. In this light, it is recommended that future research studies of the Daily Mile programme need to have the capacity to report their findings in a context where the full range of evidence are presented and where new findings are not re-contextualized and re-positioned in order to satisfy either the research funders' or the views of politicians associated with the policy making process.

Keywords: health and wellbeing; physical activity; Daily Mile; running; discourse analysis

Introduction

At a time when lack of physical activity concerns are overtaking much of the Anglophone world, school communities are increasingly suggested as sites for promoting physical activity (Piggin & Hart, 2017). In this light, the paper offers a critical account of one post millennial school-based running initiative designed to change for the better primary age children's (5-11 years) everyday engagement with physical activity through running. In reviewing the multifarious goods of running-based experiences, the paper seeks to critically analyse the purposes and intended benefits of the Daily Mile programme; a programme which is currently being rolled out in over 5000 schools with over 1 million pupils in 44 countries. The Daily Mile began in 2012 when the then Head Teacher of St Ninians Primary School in Stirling, Scotland, sought to take practical steps to improve the fitness of the pupils. Pupils were encouraged to run, jog or walk around their school grounds during a 15-minute (one mile) break from class. This intervention was in addition to activity time at school intervals and during physical education lessons. Since these

modest beginnings the initiative has morphed into something much greater in scale. Currently nearly half of primary schools in Scotland (n=850) have adopted the initiative with international interest indicating that nearly 8500 schools across 150 countries have adopted a mile a day programme. The Daily Mile programme reflects the heightened role that schools might plausibly play in promoting lifelong physical activity, where pathogenic type thinking considers that greater exercise can reduce the risk factors associated with heart disease and obesity.

Methodology

The paper predominantly uses web-based media statements, policy and political-related declarations and research findings as the main sources of data for analysing how the purposes and intended benefits of the Daily Mile are conveyed and interpreted. Accordingly, analysis covers the media content, policy statements and related research findings produced by the Daily Mile as well as the independent sources of related content which exist. Thus, the paper covers the intended purposes behind various communications, and the type of information which is circulated as well as that which is not necessarily reported and/or researched. This method draws upon the work of Fairclough (2003, p. 2) whose approach to discourse analysis 'is based upon the assumption that language is an irreducible part of social life, dialectically interconnected with other elements of social life, so that social analysis and research always has to take account of language.' This textually orientated focus is adopted in order to engage in a finer grained and more nuanced way with the nature and intentions of this high profile attempt to promote contemporary social change through greater engagement with running related activity. On this basis, a critical review of how the Daily Mile programme achieved their current dominant status and to what extent their intentions have been re-contextualized over time is presented

(Fairclough, Cortese & Ardizzone, 2007). In this way, textually orientated discourse analysis can enable social processes such as increasing physical activity through running in schools **to be explained and understood in richer and more rounded ways within contemporary education.**

The Daily Mile: origins and development

The analysis of the Daily Mile programme is mostly considered from a Scottish perspective as Scotland is where the initiative began and from where the greatest percentage uptake in the programme exists. Thus, it matters how Scotland develops the programme and what it advances as evidence of the Daily Mile positively benefitting fitness improvement and enhancing wellbeing and achievement. From the outset one of the challenges in analysing the relative benefits of the Daily Mile programme is grappling with a mix of anecdotal evidence, speculative assertions and only partially persuasive research findings. Beginning with the web-based information for which the Daily Mile organisation is responsible, under ‘Teachers’ on the website homepage, the Schools message states that ‘The Daily Mile is a fully-inclusive, free and simple initiative which improves the physical and mental health and wellbeing of children. There is no extra workload for teachers and it helps to raise attainment’ (The Daily Mile, 2018a). These two sentences contains five quite bold claims i.e., that the mere act of running a mile a day, five days a week will improve physical health, mental health, personal wellbeing, increase attainment and create no extra workload for teachers. I will restrict the forthcoming review to the first four of these claims and leave for the present the statement on teacher workload, save for mentioning that in most Scottish schools (and perhaps similarly elsewhere) the school week consists of around 25 hours teacher/pupil contact time. And if 100mins of this time (5x20mins) is given over

to preparing and completing the Daily Mile, then teachers will necessarily have 6.6% less time to complete the other parts of their remit.

Give the above introductory comments about the origins and development of the Daily Mile programme, it is worth acknowledging Fairclough's (2003) general concern that language can often be deployed in ideological ways which obfuscate certain key matters (e.g. in the latter instance, the reduction in time teachers have to complete other duties), in order for new ideas to maintain a dominant discourse role. Additionally, Fairclough (2003) notes that the rise in one-way mediated forms of communication such as web sites can both help and hinder how they are viewed by visitors. Thus, it matters in terms of the aims of this paper how evidence is cited and the clarity and accuracy of the messages advanced.

The Daily Mile: the promotional evidence and message

With reference to evidence claims made about improving physical health, mental health, personal wellbeing, a list of research findings underlying 'the science behind the Daily Mile' are set out online (The Daily Mile, 2018b). Very little of what follows counts as the type of substantive research which would confirm links to improved physical health, mental health, and personal wellbeing. The most prominent of the research articles is a quasi-experimental pilot study by Chesham et al. (2018) from the Universities of Stirling and Edinburgh who tried to quantitatively investigate some of the anecdotal claims of the Daily Mile programme. Through comparing two schools both with high levels of socio-economic disadvantage (one participating in the programme and one not), researchers assessed the physical activity and sedentary behaviour of children and found that, after correcting for age, gender and socioeconomic

grouping, that taking part in the Daily Mile led to an improvement in physical activity. On this basis, the researchers conclude that the Daily Mile is a worthwhile intervention to introduce in schools and that it should be considered for inclusion in government policy. Relative to other pronouncements, these are quite measured reporting comments but they are not large scale findings in terms of understanding better the benefits of the Daily Mile programme relative to the benefits claimed for the initiative. This is something the research team acknowledge, when stating that ‘It is essential that the current studies are replicated in a larger number of schools and countries to ensure that the findings are both robust and repeatable in different educational contexts’ ... (and that) ... ‘it is necessary to conduct carefully designed studies to understand the impact of the Daily Mile in different socioeconomic settings and to understand whether it can have any impact on the attainment gap’ (Chesham et al., 2018, p. 11).

The first part of the quote above highlights the scope of the further research which is required to substantiate initial findings so as to avoid making problematic and inflated claims about the links between the Daily Mile programme and improving physical fitness. Indeed, it seems wise to address these matters before addressing wider claims about improving mental health and personal wellbeing, both areas where concerns exist in Scotland, see for example, Thorburn & Dey (2017). The second part of the quote raises the prospect of whether the Daily Mile programme is as beneficial and necessary in some communities as it might be in others. For example, it could be that pupils from poorer socioeconomic backgrounds may benefit in particular from the programme, partly due to their engagement in physical activity and partly in relation to enhancing academic attainment. These types of concern matter a great deal in a Scottish context as the Scottish Government (2016, p.1) remains committed to a comprehensive

schooling model as ‘evidence shows that co-operation and collaboration, not competition or marketisation drives improvement.’ This education for all conviction is most evident in the quest to achieve greater equity in education through closing the attainment gap for those pupils disadvantaged by the effects of poverty. The party manifesto for the current largest partner in a minority Scottish Government (the Scottish National Party) is that ‘ensuring excellence for all and closing the gap in attainment between young people from our most deprived and least deprived communities will be the defining mission of the SNP in the next parliament’ (Scottish National Party, 2016, p. 8).

The ambiguity surrounding how exactly closing the attainment gap can plausibly connect with completing a Daily Mile run is partially addressed on the teachers part of the Daily Mile website (The Daily Mile, 2018a), where for example, one motivating-type quote from one head teacher states that: ‘The Daily Mile is part of a massive journey for the school. We are raising aspirations, showing the children they can be better, and do better. The Daily Mile puts a rocket up their learning. We do it every day, all year round.’ While there is a plethora of similarly vague but optimistic comments about the benefits of the Daily Mile programme on the website, it might have been expected that a head teacher could have expressed their views in more measured and precise terms. However, while this excited imprecision might be innocuous enough, the same cannot be said for the statements from Scottish Government web briefings where the lack of referencing to support claims made is more troubling. During two despatches in 2017, the Scottish Government firstly through a press release wrote to schools, nurseries, colleges and universities urging them to help Scotland become the first Daily Mile Nation (Scottish Government, 2017a). In this correspondence the Deputy First Minister for Scotland and Cabinet

Secretary for Education and Skills, John Swinney was the most forthright in mentioning the perceived ‘benefits of the Daily Mile, not just too physical and mental health but to raising attainment levels and improving relationships between pupils and teaching staff’ (Scottish Government, 2017a). This is relative to the more measured endorsement of the Chief Medical Officer, Catherine Calderwood who said: ‘We know that physical activity is so important for children’s development’ and that guidelines recommend at least 60 minutes exercise a day for five to 18-year-olds (Scottish Government, 2017a).

In their later elaboration of the Daily Mile basic principles that apply to primary schools and early learning and childcare settings, the Scottish Government (2017b) set out in greater detail what they considered to be the extended benefits of participation. It is noted that through the Daily Mile pupils:

... can experience various health and wellbeing benefits and improved outcomes, including: reduced anxiety and stress; improved cognition; improved fitness and energy levels; greater concentration levels in class; improved wider health outcomes; experience of being outdoors in all seasons/weather; lower levels of obesity/weight reduction; increased confidence and levels of happiness; improved relationships and reduced isolation; sense of achievement in improving their own fitness/stamina and sense of pride in participating; greater resilience and determination; greater spatial awareness and more highly developed motor skills.

(Scottish Government, 2017b)

This thirteen point list containing an even greater number of criteria are accompanied by some light touch interdisciplinary examples of how the Daily Mile programme might link to: nutrition; early literacy and numeracy skills e.g. simple, child-pleasing ways to measure laps/distance can

be useful and motivating and being outdoors provides ‘further provocations for learning, for example about the natural world and physical environment’ (Scottish Government, 2017b). The evidence to suggest that ‘regular physical activity, such as the Daily Mile, is essential for brain development, can help raise attainment and lead to improvements in social, mental and emotional health’ (Scottish Government, 2017b) is solely based on what is considered to be the ‘large scale research carried out by the University of Stirling and University of Edinburgh’, which indicated that children's attention and memory improves after exercise (Scottish Government, 2017b). However, as noted earlier, the Chesham et al. (2018) study findings are limited in scale and depth relative to the extended Scottish Government (2017b) outlining of the possible benefits of the Daily Mile programme. As such, the thirteen point list expounded by the Scottish Government (2017b) takes the form of a self-affirming promotional message which is based on a mix of modest evidence and in some instances no particular evidence at all. Such message systems can lead to a blurring of the distinction between facts and speculative claims and assertions which are in addition persuasively housed in glossy self-promoting and policy endorsing publications (Fairclough, 2003).

More recently, some of the team of researchers who completed the Chesham et al. (2018) study from the University of Edinburgh joined forces with the BBC Learning’s Terrific Scientific campaign in a shared news post (University of Edinburgh, 2017). This post contains details of a further small study where data was collected on young people who had either sat outside, completed a run or walk for 15 minutes or run to the point of exhaustion when completing a bleep test. Perhaps unsurprisingly, it was found that pupils’ best responses to tests came after physical activity that was set at their own pace, as opposed to running to the point of exhaustion.

Of more concern at this time is the claim, that ‘following the run/walk, children’s ability to remember words in sentences improved ... however, there appeared to be no real difference to their ability to remember shapes’ (University of Edinburgh, 2017). Overall, it might have been merited for this type of later associated evidence to have been subject to wider peer review rather than included as part of a related news post.

Elsewhere, on the Daily Mile website, a further study by Breheny et al. (2018) reads more as an early stage scoping review rather than the promised plausible measure of the effectiveness of the Daily Mile programme for improving health and wellbeing. It is very difficult to ascertain what exactly this study found as it contains very little discussion of findings and no conclusions. Thus, readers are left with some rather underwhelming discussion content e.g. ‘adherence to the recommended 15 min of activity daily may be variable and depend on other academic commitments or physical factors such as the weather ... (and again) ...Teacher attitude may also affect whether children decide to continue doing activities similar to The Daily Mile outside of school’ (Breheny et al., 2018, p. 6). What then follows, as research evidence are two blog links, a school report on Daily Mile progress, and links to two research partner organisations and a newspaper report.

As well as supporting evidence on the Daily Mile website there is also associated reporting and media endorsements for the Daily Mile programme which arise from a more variegated assembly of often overlapping influences. For example, The Sunday Times Editorial Comment of 03/06/2018 ‘Let’s get our children to run for their lives’ states that:

It is good, that Jim Ratcliffe, founder of the chemicals giant Ineos, who topped The Sunday Times Rich List, is backing the Daily Mile charity project. He believes that in the fight against obesity it should be compulsory for all the country's primary school children to run a mile a day, and is providing financial backing for the initiative, which started at St. Ninians Primary School in Stirling in 2012. It has been adopted by 40% of primary schools in Scotland, 20% in Wales and 10% in England. Mr. Ratcliffe is right. Children who exercise every day are happier, healthier and more productive. This is an idea that deserves to run and run.

The overlapping influences evident here are that The Sunday Times Editorial links in the same week of publication to The Sunday Times Rich List which features extended details on Britain's richest person - Jim Radcliffe, who is founder of the chemicals giant Ineos, which is one of the largest employers in central Scotland and who is a keen supported of the Daily Mile programme. While, these types of message linking are a feature on modern capitalism, the comment that 'Children who exercise every day are happier, healthier and more productive' is of greater concern as it is based on assertion and not verified evidence.

A more academically concerning example of this form of tangential linking to the Daily Mile programme comes from Dr Richard Bailey from the Berlin based International Council of Sport Science and Physical Education. Bailey is quoted on the Daily Mile website, stating that: 'Physically active children and young people perform better academically than their inactive peers and those who are most active benefit the most.' It is not evident whether the quote is an isolated comment or a quote from an as yet unreferenced article. What appears evident however is that the views of Richard Bailey on the academic benefits of physical activity and physical education have changed over the last decade? For in an academic review of the educational

benefits claimed for physical education and school sport, as far as the cognitive domain was concerned Bailey et al. (2008, p. 15) notes that:

Based on the available research evidence, however, we might conclude that increased levels of PESS (physical education and school sport) do not interfere with pupils' achievement in other subjects (although the time available for these subjects is consequently reduced), and in some sub-groups outcomes may be associated with improved academic performance. More positive evidence relates to relationships between physical activity and cognitive functioning, especially when sustained over a long period of time.

This quote highlights that while affirmative evidence exists of a positive relationship exists between physical activity, brain development and cognitive functioning this may take a long period of time to nurture and is not necessarily something which flourish with short amounts of curriculum time spent running and/or walking. In this respect, it may be unwise for the Scottish Government (2017b) to argue that further exercise will enhance concentration and to make further projected claims about the benefits of the Daily Mile programme. In this regard, Bailey et al. (2008, p. 15) is helpful when arguing that detailed research into the complexities of how 'the precise mechanisms that might cause cognitive benefits, or the ways in which different types of activity and different ways they are presented might initiate those mechanisms' is needed to inform the design of physical activity initiatives. This concern certainly seems merited relative to arguing as Bailey currently does that physical activity can help children and young people perform better academically.

Discussion

In the wider Scottish policy context, the Daily Mile programme has had to engage with the complex and often competing traditions of education, where school education in Scotland in particular is highly valued but where coherent progress is often stifled by an ‘unjustifiable degree of complacency’ (Humes & Bryce, 2008, p. 149). This has often have led to an ‘ambivalence over the use of evidence to generate policies’ (Humes, 2017, p. 14). However, it might also be that something more recurring is happening, namely that internal politics can lead to situations where politicians are keen to trump each other on new ideas e.g. when seeking to highlight how greater devolved governmental powers are making a constructive difference to the quality of life in Scotland. For as Cairney (2009) notes, with regard to introducing smoking bans in Scotland, political parties sought to outdo each other through the boldness of their plans. Arguably, a similar situation exists with the Daily Mile programme as a contributor to improving health and wider achievement outcomes. In this context, overly enthusiastic and/or overly compliant civil servants can become prone to overestimating or even fabricating the capacity of the Daily Mile programme to be the good news story their political masters wish. Moreover, similar problems could exist with wider stakeholders in the policy process, as evident in part by the potentially blurred lines of high visibility self-interest shown by some advocates of the Daily Mile programme e.g. Jim Radcliffe.

Fairclough (2003) provides insight into how such a tangled state of affairs can occur and of what might have lead for example to the Deputy First Minister for Scotland and Cabinet Secretary for Education and Skills, indicating that the benefits of the Daily Mile improve not only physical health but extend to improving mental health and raising attainment levels. As noted earlier,

Fairclough (2003) considers that such entanglement is often associated with the development of a promotional culture, and a promotional message. This message system can often contain ‘a blurring of the distinction between statements of fact and predictions’ becomes manifest (Fairclough, 2003, p. 113). As also outlined earlier, compounding this situation further are promotional message systems which are dominated by polished self-promoting policy texts which contain scrupulous attention to layout, design and impact e.g. Scottish Government (2016); Scottish National Party (2016).

Supporting such concerns, Humes (2017, p. 28) concluded when reviewing political party manifestos and their educational commitments in Scotland in 2016 that ‘it is evident that much needs to be done to strengthen data sets as a basis for high-quality educational research and to encourage independent, critical analysis which might serve to better inform policy choices.’ The requirement for strengthening data exist as far as the multifarious goods of running are concerned, for as yet there is very little evidence of the Daily Mile programme setting up detailed research engagement strategies on the complex and interrelated issues surrounding physical and mental health, the wellbeing of children and raising attainment.

Moreover, under the auspices of the promotional culture messaging system surrounding the programme, there is the risk that Daily Mile programme could end up being hoisted by its own petard. Thus, it could become foiled by its own plans to play a constructive part in promoting lifelong activity physical through its multifarious associations with health and achievement outcomes (Scottish Government, 2017b). Accordingly, the importance that the Scottish Government attaches to the Daily Mile programme may not necessarily be consistent with what it can plausibly achieve. In this regard, undue claims about the wider health and achievement

benefits of the Daily Mile programme could over time become its holy grail i.e. something which the programme would like to achieve but which in practice it is very unlikely to be able to do.

Moreover and more widely, it might be considered that the Daily Mile programme is conceptually limited and partially confused from the start as it adopts a deficit (**pathogenic**) approach to health and wellbeing (Kirk, 2018; McCuaig, Quennerstedt & Macdonald, 2013). This is in preference to a strengths based approach which is characterised by pupils identifying positive exercise habits and lifelong lifestyle choices rather than routinely completing a mile a day run to improve health and reduce health risks such as obesity. Thus, a 20 minute a day quick fix is unlikely to be the touchstone upon which a more intense engagement with physical activity can take hold.

Following, Dewey (1922/2012, p. 31) who noted 'habit is the desirable thing and the routine the undesirable thing', Thorburn (2018) outlined how programmes like the Daily Mile need to get beyond rigid and routine daily procedures and connect programme aims with more insightful sequential learning episodes, where there is a pupil decision making focus on personalisation (route chosen, types of terrain, running speed and distance), language (log book, reflective journals, record of times taken) and shared participation (planning future walking/running routes). If effective, these new embodied habits could become deep-rooted and resistant to other school and societal pressures which may conflict with regular exercising. Progress on this basis might go some way to putting the 'rocket up learning' which is being championed. That said even this type of progress might be limited relative to a more extended review of the holistic nature of mind/body development, in ways which recognise that very little attention is currently

paid in Scottish education as to why the body is so passive for such a large part of the school week.

Conclusion

Through a textually orientated discourse analysis approach, this critical paper has reviewed the perceived benefits of running claimed by or on behalf of the Daily Mile programme. This approach has highlighted that there are problems with the Daily Mile programme in terms of the plausibility of supporting political claims made, the veracity of associated stakeholder reporting and the routine nature of the programme. The lack of research into the benefits of the Daily Mile programme is its greatest weakness, especially as the formative years of the programme have coincided with unsupported claims being made for self-improvement, most notably with regard to how regularly running benefits can improve academic attainment. Thus, at present, issues of trust exist, which may result in the Daily Mile programme having an unfortunate backwash effect on activity provision in schools if it becomes evident (as is possible) that in fact running a mile a day does not necessarily bolster academic attainment. Consequently, there is a need for wide ranging and nuanced research studies into the benefits of the Daily Mile programme, which includes among other matters reviews pupils perspective on their daily running experience and the extent to which this might change during their primary school years. Moreover, in a Scottish context it would be wise to research what is likely to happen to young people's daily physical activity once their involvement with the Daily Mile programme ends at age 11 years. Without this occurring, there is the risk that statements from central government obfuscate matters and they continue to set the agenda

and exercise power in the form of continuing to endorse the benefits of the Daily Mile programme in ways which are not necessarily conducive to its longer term future. This is a telling matter, for as Kirk (2013) has pointed out, the most cherished of all goals connected with physical activity and education programmes in schools is that they will lead to increased levels of active lifelong activity in later post school life.

However, as this paper has made clear there is an inherent concern in the conclusions highlighted thus far. For as this paper has shown the modest research evidence which exists is rarely being used properly, so in this regard how would more substantial research findings fare any better? In this respect, the ambivalence shown towards the use of evidence to generate policies which Humes (2017) notes, is of considerable concern. It is clear therefore that any robust research studies of the Daily Mile programme which are taken forward need to have the capacity to report their findings in a context where the full range of findings are presented and where new findings are not re-contextualized and re-positioned in order to satisfy either the funders of research or the views of politicians associated with the policy making process. Under this approach the contrast between assumptions and the textual detail of research findings would become more apparent as for example evident by increased quotations from research and attributions to specific other findings and far less by way of unsupported and rather vacuous assertions.

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