

Walking and Writing, Running and Redrafting

Towards a template for the physically-active creative.

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ABSTRACT

This paper investigates the interdisciplinary and symbiotic links between creativity and physical activity in order to present a template for a physically-active creative. Co-written by a Creative Writing and a Sport and Physical Activity academic, the research draws on existing literature across both disciplines and original quantitative and qualitative research. After exploring examples of famous writers and artists who undertook exercise as part of their creative process and incorporating a review of studies on creativity from the physical activity and sport context, this article then moves on to present results from a 2018 Pilot Study, undertaken at the University of Stirling, and a 2021 online Graduate Event, conducted in partnership with the Scottish Graduate School for Arts and Humanities. In doing so, the authors conclude by proposing three non-prescriptive recommendations for how to incorporate physical activity into a creative routine and foster a best practice that utilises concepts from the field of sport and physical activity to further understand and develop the creative process.

INTRODUCTION

Over the past five years, the creative writing teaching team at the University of Stirling have often conducted meetings while walking around the on-campus loch or taken ourselves out towards the higher lands of the Trossachs for a group bike ride. All of us, in our different ways, are engaged in regular physical activity and, as this paper discusses, have developed an interest in the ways in which that exercise links to our writing practice. We realised that we didn't recognise the sedentary model of a writer chained to the desk or, as in the case of Patricia Highsmith, writing sitting up in bed (Currey 2013: 10). Similarly, we didn't see ourselves in the hedonistic writer epitomised by the apocryphal story of Hunter S. Thompson's daily consumption of cocaine, Chivas whisky, Dunhill cigarettes and "grass to take the edge off" (Jean Carroll 1993: 7). Instead, we began to form a collective idea of a physically-active creative with a routine of exercise that was integral to their writing. As our colleague Kevin MacNeil put it: "The image of writers is changing slowly but the reality is changing more quickly... more of us are aware of and appreciative of physical activity" (Scottish Graduate School of Arts and Humanities Event, 21/01/2021). We discussed this with colleagues in Sports Studies and realised that there were potentially myriad linkages between the disciplines, with a symbiotic relationship between exercise and creativity. From this basis, we began to investigate the ways in which writers make use of different physical activities within their writing day and this led to a Pilot Study, by way of an online survey conducted in 2018, and an online event held in 2021 with Scottish Graduate School for Arts and Humanities (SGSAH). In discussing this research, we hope to point to a series of productive ways in which creatives can use physical activity within their routine and, indeed, initiate a further discussion on the links between creativity and physical activity. It is worth noting, particularly in the context of the 2019 COVID pandemic and emerging concerns about Long COVID, that the physical activity we are exploring is not, of necessity, strenuous or high-exertion, but can include activities of daily living. In fact, the sport and physical activity context in Section Two considers many forms of physical activity and, further, our understanding of creative engagement with physical activity can be extended, by the work of Scottish artist Alec Finlay, to the 'proxy walk'. Finlay explains the practice as "a recipient chooses a place they loved to walk, when they could, and the walker does the walk for them" (Finlay 2020).

It is important to underline, therefore, that we're not seeking to propose an ableist interpretation of possible synergies between creativity and physical activity, but rather explore how the creative's own version of physical activity can be useful for their own particular process.

SECTION ONE CREATIVE CONTEXTS

The primary dataset used throughout this paper is from our October 2018 Pilot Study, an anonymous online survey of writers recruited through social media and professional networks, which asked a series of qualitative and quantitative questions relating to creativity and physical activity. We had 35 respondents to this study and, as shown in Figure 1., when asked about activities they currently used as part of their physical activity routine, the most popular physical activity selected was walking, followed by running and gym work. This last entry of 'gym' is a little ambiguous – as it can include multiple activity types – so the discussion below will be split into three sub-sections, considering creative responses to walking, to running, and to other activities including cycling and swimming.

Figure 1. Activities currently used as part of creative writer's physical activity routine

Type of activity	Number of Responses	Number (%)
Walking	28	(80%)
Running	10	(29%)
Gym	10	(29%)
Cycling	9	(26%)
Swimming	7	(20%)
Yoga	6	(17%)
Pilates	3	(9%)

Results taken from 2018 Pilot Study conducted via online survey. There were 35 respondents and respondents were permitted to list multiple activities. Activities with only one response not included above – Gardening, Badminton, Golf, Snowboarding, Horse riding.

Walking

Eighty percent of our respondents included walking as part of their physical activity routine and this is, perhaps, not surprising given the long-established conjectural link between walking and creative thought. Jean-Jacques Rousseau wrote “I can only meditate when I am walking. When I stop, I cease to think; my mind only works with legs” (quoted in Solnit 2014: 14). This same relationship was investigated, in an academic context, through a study from Stanford University in which participants were found to be more creative walking rather than sitting (Opezzo and Schwartz 2014). This experiment allowed for the impact of other factors, for instance a change in surroundings, and still found a positive relationship between walking and creative thought. This gives credibility to a practice that creatives have long engaged in; with Beethoven going for afternoon walks with “a pencil and a couple of sheets of musical paper” (Currey 2013: 18) and the poet Wallace Stevens walking endlessly and “stopping now and then to scribble lines on one of the half-dozen or so envelopes he always had stuffed in his pocket” (ibid, 115). Those examples, though, are largely about walking to stimulate thoughts or to provide respite as part of the creative process – and Rebecca Solnit’s history of walking, *Wanderlust*, is intriguing because it also charts the evolution of writing about walking. Her discussion ranges from William Hazlitt’s 1821 essay ‘Going on a Journey’ through to New Nature writers such as Kathleen Jamie, our former colleague at Stirling. These New Nature writers use the walk as the base for further explorations “about the walker’s character or encounters, about nature or about achievement, sometimes so much so it ceases to be about walking” (Solnit 2014: 132). Within that frame, we have the possibility of creativity and physical activity becoming so intimately bound together that one does not exist without the other. Walking becomes a means of researching and investigating – of gathering material – rather than an activity to undertake as distraction or respite. In seeking inspiration, the landscape isn’t merely a backdrop but an opportunity to engage with the space, whether in a rural or an urban environment. The term ‘psychogeography’ becomes useful here. This idea, first expounded by Guy Debord, explores how the environment around us impacts on the individual; how our surroundings make us feel and behave (ibid, 212). As Michel de Certeau would have it: “A city is a language, a repository of possibilities, and walking is the act of speaking that language, of selecting from those possibilities” (ibid, 213). In a

contemporary context, Linda Cracknell’s memoir *Doubling Back* provides an example of the ways in which physical activity can be directly linked with the creative process, with the author embarking on a series of walks to tell ten stories, most notably that of a friend’s father who escaped Nazi-occupied Norway by way of climbing “across the Dovre mountains and into neutral Sweden” (Cracknell 2014: 107). In a wider, community-focused study, the University of Glasgow researcher Professor Dee Heddon has investigated smaller acts of creative intervention undertaken during lockdown walks throughout the 2019 COVID pandemic; for instance chalk rainbows, fairy trails, and painted stone snakes. She imagines that people are communicating, through these acts of creativity, that “we have to be apart, but I can leave something for you. And, in doing that, I can continue to participate in culture, society, and community” (Garavelli 2021). In these ways, then, walking and creativity link not as two separate activities which have mutual benefits but as intertwined activities where the writing or other creative work emerges directly from the act of walking.

Running

Studies such as the one conducted by Opezzo and Schwartz (2014) above, suggest that even walking at a comfortable or ‘light’ walking pace can have a positive effect on creativity. This spectrum of exercise – light, moderate, vigorous – is commonly used in sport and physical activity studies, as we explore in Section Two, and allows for crossover and nuance. For instance, incidental activities like walking around at work could be classed as ‘light’ whereas a brisk walk where your heart rate is raised could be classed as ‘moderate’. Whilst the connection between light physical activity and creativity can be evidenced, can we do the same for more intense physical activity and exercise? In 1997 a paper by Steinberg et al. titled ‘Exercise enhances creativity independently of mood’ found that participants showed greater flexibility in generating unusual uses for common objects after undertaking a more intense aerobic exercise session (Steinberg et al. 1997). This creative problem-solving would seem to point towards a beneficial effect between moderate-vigorous exercise and creativity and, again, it is possible to find a number of prominent, contemporary writers who extoll the virtues of running for their writing routine. Notably, Joyce Carol Oates goes as far as to say that running “seems to allow me, ideally, an expanded consciousness in which I can envision what I’m writing as a film or a dream” (Ripatrzone

2015). The sheer volume of writers for whom running forms part of practice can be seen in a 2019 poetry anthology, *The Result is What You See Today: Poems about Running*, which features a total of 110 poets including well-known names such as Helen Mort, Tracey Herd and Peter Sansom. Perhaps the seminal text for exploring the symbiotic connection between running and creativity, though, is Haruki Murakami's *What I Talk About When I Talk About Running*. As with Oates, he links exercise to the creative writing routine and to the generation of ideas but, crucially, he goes further and also suggests its importance to what we might term resilience. For instance, he states: "When I'm criticised unjustly (from my viewpoint, at least), or when someone I'm sure will understand me doesn't, I go running for a little longer than usual" (Murakami 2009: 20). Here then is the idea of more intense exercise as a way of releasing frustration or working through an emotional response to a work pressure. We move beyond the creative writing routine into wellbeing and beyond the generation of ideas into coping with feedback/criticism. This aspect was of great interest to us because, as creatives, we often have to deal with rejection in one form or another. As a result, you'll see that some of the questions included in the Pilot Study – discussed further in Section Three – are seeking responses not merely on the link between physical activity and the imaginative act but also whether physical activity is of use later in the process when the task at-hand is not necessarily fully creative; for example, in submitting work to publishers or dealing with the myriad administrative tasks which go along with the creative professions.

Cycling and Swimming

The contexts for the main threads and themes which we'll explore from our 2018 Pilot Study can be identified in the review of literature about walking and running above. However, it is worth outlining two further points before moving on to examine the sports and physical activity contexts, in Section Two, and then further results of the 2018 Pilot Study and 2021 SGSAH Event in Section Three. Firstly, our interest was in capturing a wide range of physical activity within this discussion so it is vital to touch upon relevant texts on cycling and swimming. Secondly, it is important to emphasise that much of the exploration thus far has been about creative writing – because it is from this discipline that the research emerged – but the SGSAH Event did invite contributions from creatives in other fields, for example visual arts, and so we'll briefly examine that

context too.

To do this, it is useful to consider David Byrne's *Bicycle Diaries*. Byrne, a musician and visual artist, takes his bike with him everywhere he goes and cycles through the cities he visits. He links this physical activity explicitly to his creative process, stating "It facilitates a state of mind that allows some but not too much of the unconscious to bubble up" (Byrne 2009: 4). He mentions the "repetitive, mechanical" (ibid) nature of cycling and, in this way, his observations link back to Murakami's thoughts on running. Cycling enjoys a similar array of exponents, across the creative professions, and there is again an anthology dedicated to the virtues of this physical activity and its links to writing, *The Art of Bicycling: A Treasury of Poems* (Belmont 2005). This collection is often oblique in its references and is less focused in time period than the running anthology noted above, but entries including Pablo Neruda's 'Ode to Bicycles' and Seamus Heaney's 'Wheels Within Wheels' demonstrate the grip that this particular form of physical activity often holds on writers. Similarly, swimming's connection with creative culture has been extensively explored in Charles Sprawson's *Haunts of the Black Masseur* and continues to be lauded (and occasionally ridiculed) through the *The Guardian's* fondness for articles on wild swimming. Two contemporary writers who explore the synergies between swimming and writing with particular imaginativeness are Amy Liptrot and Elizabeth Jane-Burnett, in *The Outrun* and *The Grassling* respectively. Liptrot notes, in her introduction to a new edition of Sprawson's book, that she has "written almost obsessively about my swims. I find a five-minute dip in the sea provides as much material and inspiration as a much longer walk or time spent deliberately thinking" (Liptrot in Sprawson 2018: xi). Again then, as we found with the examination of walking above, physical activity occupies a much more important place in the routines of many creatives than as a simple distraction or means to maintain fitness; for many it has developed into an integral part of the process itself. It is not, therefore, time spent away from creativity or a separate element of these creatives' lives but, rather, a vital component of that creative practice. In Section Three, we'll delve into the data from the Pilot Study and SGSAH Event to examine the ways in which this occurs and, crucially, at which stages of the process creatives make use of physical activity. However, in order to fully understand why creativity and physical activity should be discussed together, we will first look to

the field of sport and physical activity research and how they define, discuss and contextualise physical activity as a concept.

SECTION TWO SPORTS AND PHYSICAL ACTIVITY CONTEXT

From the accounts of writers in the previous section there emerges a clear and positive link between creativity and physical activity. Reading through these quotes and observations from a scientific perspective, much of what they note can be supported within the physical activity, psychosocial and biological science literature and in this section we touch on those links between creativity and physical activity.

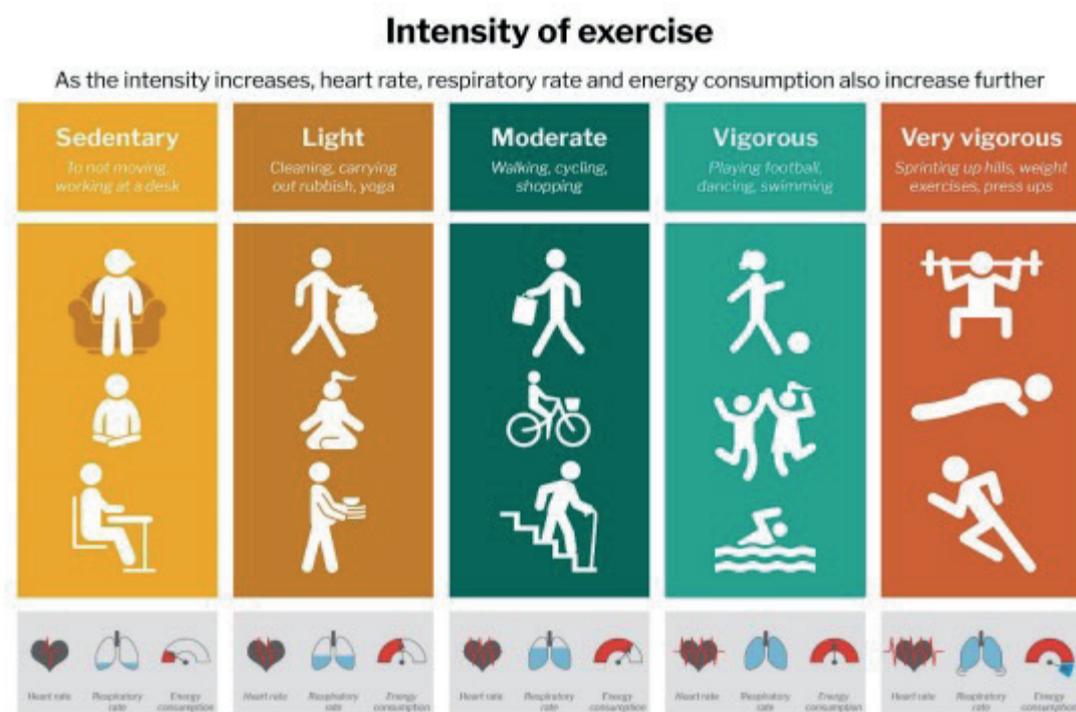
Key Concepts and Definitions

To start, it is important to outline key concepts and definitions within physical activity. Whilst there is conjecture regarding the exact definition of physical activity, for example on whether the definition of physical activity is too narrow and should be more holistic in nature (Piggin 2020), the definition provided by Caspersen et al. with a physiological base is widely accepted. This states: “Physical activities are any bodily movements produced by skeletal muscle that result in energy expenditure” (Caspersen et al., 1985). This definition then goes on to note that ‘exercise’ is a “subset of physical activity that is planned, structured, and repetitive and has as a final or an intermediate objective for the improvement

or maintenance of physical fitness” (ibid.). We often therefore describe physical activity as an umbrella term that encapsulates not only exercise and sport, but all types of activity and movement. In the words of the World Health Organization 2020 campaign to promote global physical activity ‘Every Move Counts’ and it’s important to acknowledge that even simple movements such as standing doing the dishes or climbing the stairs can contribute towards our daily movement.

However, whilst all activity is typically beneficial, different types of activities can have different benefits and this was alluded to by some of the writers discussed in Section One. We typically discuss physical activities in terms of their dimensions: Frequency (number of sessions per day/week); Intensity (rate of energy expenditure); Type (whether swimming, walking, yoga etc.); and Time. These are sometimes, therefore, referred to as FITT principles (Strath et al. 2013). A physical activity is often described by the intensity it takes to perform it and is visualised as a ‘spectrum of intensity’ as depicted in Figure 2.

Figure 2. Taken from ‘UK Chief Medical Officers’ Physical Activity Guidelines’, 2019.



Another area that is worth noting with regards to creativity is sedentary behaviour. This is defined as “any waking behaviour characterized by an energy expenditure ≤ 1.5 METs while in a sitting, reclining or lying posture” and excludes sleep (Tremblay et al. 2017). This includes sitting watching TV, driving in the car, or working seated at a desk. Being ‘sedentary’ is not just a term for people who sit all day and don’t move but is relevant even for those who run for say 30 minutes a day or cycle to work for an hour as these ‘active people’ can still spend a number of hours sitting in-between times. Being sedentary for writers and in fact many traditionally desk-based occupations is something that is the culturally accepted, with office-based employees said to spend 67% of their working day sitting at their desk (Ryde et al. 2014).

Benefits of Physical Activity

In addition to defining these terms it is also useful to understand why physical activity is so important; even leaving aside the potential outcome of creativity. Being physically active is linked to numerous benefits, with positive changes to our physical health probably the most well-known. However, there are also other benefits including mental and social health, as well as wider societal and economic impacts. Health benefits have been described as ‘irrefutable’ and include improved longevity and quality of life, reduced blood pressure and cholesterol, prevention and treatment of diseases such as diabetes, depression and anxiety, heart attacks, stroke and some cancers (Warburton and Bredin 2017). Conversely, sedentary behaviour is linked to poor health outcomes in many of these same areas, with individuals encouraged not only to be active but to try and reduce sedentary behaviour where possible. Whilst there is some evidence to suggest that those who are active can ameliorate some of the negative effects of ‘too much sitting’ this evidence is still emerging (Eklund et al, 2016).

With regards to creativity, there is evidence of a beneficial effect from physical activity as alluded to in Section One. Many experimental studies (typically laboratory based or with very controlled and prescribed interventions), such as Oppizzo and Schwartz, have reported positive benefits on creativity immediately after a single session of physical activity; known as acute effects (Steinberg et al 1997). Others have delivered longer programs of activity (several sessions of activity over weeks/ months) and again found this sort of chronic physical activity to be beneficial to creativity

(Gondola and Tuckman 1985, Gondola 1986, Tuckman and Hinkle 1986). There is also evidence from observational studies that show those who are fitter or who take part in regular activity tend to be more creative (Cavallera et al. 2011, Rominger et al. 2020). A study by Rominger et al. used device measures of physical activity to assess daily physical activity levels (without asking people to change their routine) and assessed creativity over the course of a week. As with other studies, they found that higher intensity, vigorous activity was associated with increased creative performance. However, they also reported that moderate intensity activities performed as part of daily living were also associated with creative performance. Sedentary activities were negatively linked with creative performance. Whilst there are several methodological concerns with this study, largely to do with categorizing sedentary and light activity together and not indicating exactly what types of activity were included as moderate, it does indicate that even general movement throughout the day can be beneficial for creative processes.

It would seem, therefore, that the accounts of creative writers and artists in Section One are supported by physical activity and sport research. Taking part in activity and being physically fit appears to be beneficial for creativity, regardless of whether the activity is performed for creative purposes. For example, running every morning routinely might not be an activity undertaken with creativity explicitly in mind, but it does have a positive impact in that regard. For those who are less inclined to exercise, taking ‘activity breaks’ whilst in the creative process also appears to boost creative performance even in short, one-off bouts. Even just sitting less and moving more throughout the day may be enough to help with creativity. Whilst the above studies varied greatly in what exactly people did or were prescribed to do, following the World Health Organization physical activity guidelines seems to be good advice for creative practitioners. These guidelines suggest that we should be taking part in at least 150-300 minutes of moderate intensity physical activity a week or 75-150 minutes of vigorous activity (or a combination of both), strength and balance activities on two days a week, and also reducing sedentary time wherever possible (‘WHO Guidelines on Physical Activity and Sedentary Behaviour’, 2020).

SECTION THREE RESULTS AND RECOMMENDATIONS

In the two sections above, then, we have explored the synergies between creative writing and physical activity as disciplines which overlap in ways which begin to reinterpret and reimagine the creative process. Within this third section, we will take that a step further and review the findings from our own research (the 2018 Pilot Study and 2021 Graduate Event) and present a possible template for a physically-active creative, based on recommendations gleaned from our research for the ways in which physical activity can be integrated into the writing process.

Review of Pilot Study and Graduate Event

In Section One, in relation to Murakami's text, we hypothesised that physical activity and sports might be of use not just in the generation of ideas but also in terms of resilience in the face of rejection and disappointment. The pilot study allowed us to test this hypothesis, as shown in the two graphs below; Figures 3 and 4.

Figure 3. Question III.2 in 2018 Pilot Study.

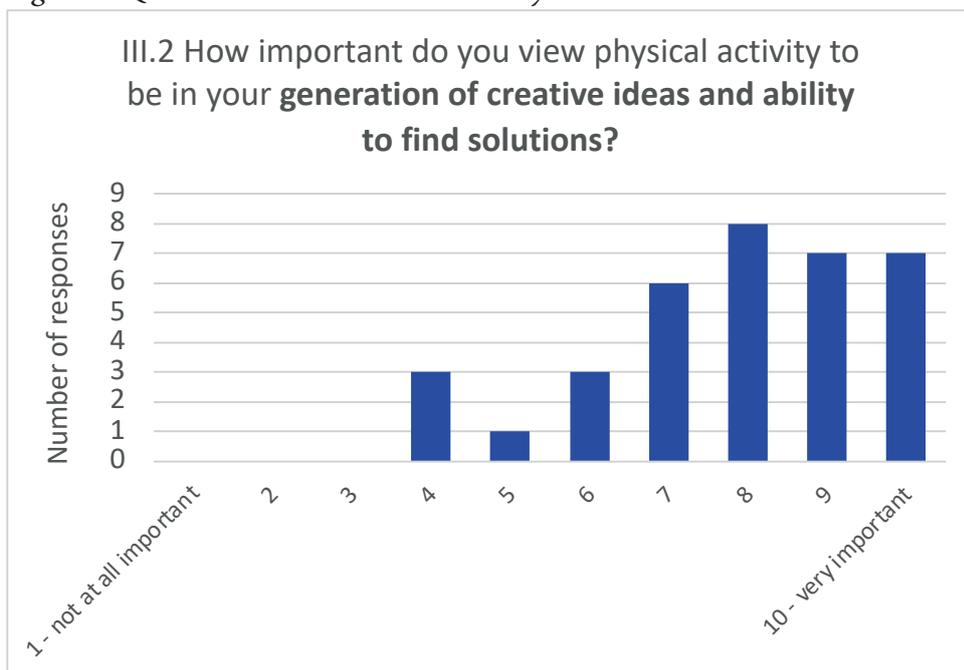
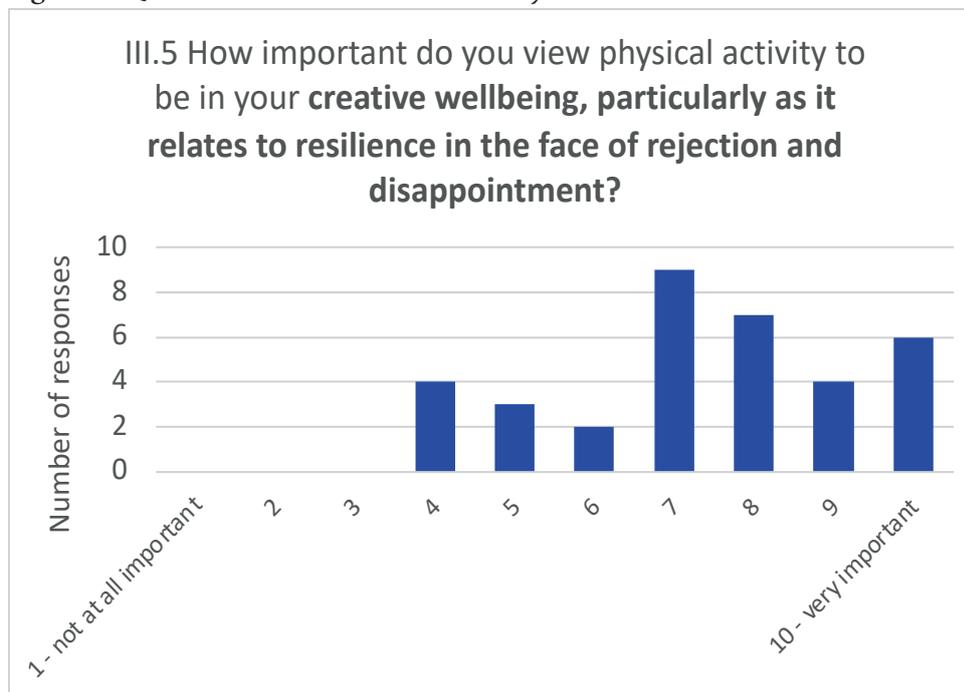


Figure 4. Question III.5 in 2018 Pilot Study.



The first graph, Figure 3, interrogated the usefulness of physical activity in the opening stages of the creative process; whether that be the generation of an idea or the working through of that idea. The responses translate to a mean score of 7.83 (where 10 indicates very important). The second question, Figure 4, about resilience in the face of rejection and disappointment, translates to a mean score of 7.37. We can extrapolate, therefore, that our supposition that writers were using physical activity throughout the creative process – rather than just in generating ideas – was correct. This is important as it points to a template for a physically-active creative whereby the exercise or activity is integrated into the daily creative routine and is sustained over a substantial length of time. Certainly, though, the qualitative answers to our survey highlighted that it was often in the initial stages of a creative project where the

benefits of creative writing were most immediately obvious, with one respondent remarking “most days I’m working on some new idea while I’m running” and another noting that “after a period of stagnation it is often either walking or travelling that allows ideas to flow” (Pilot Study 2018).

Interestingly, the self-assessed linkage between creativity and physical activity didn’t extend, in our study, to the process of editing, copy-editing and approaching the publication cycle. This can perhaps be seen as slightly removed from the creative process – as the industry-facing side of being a writer – and the responses to the question concerning this aspect of the writing process generated a mean score of only 5.56, the lowest in the survey; see Figure 5 below.

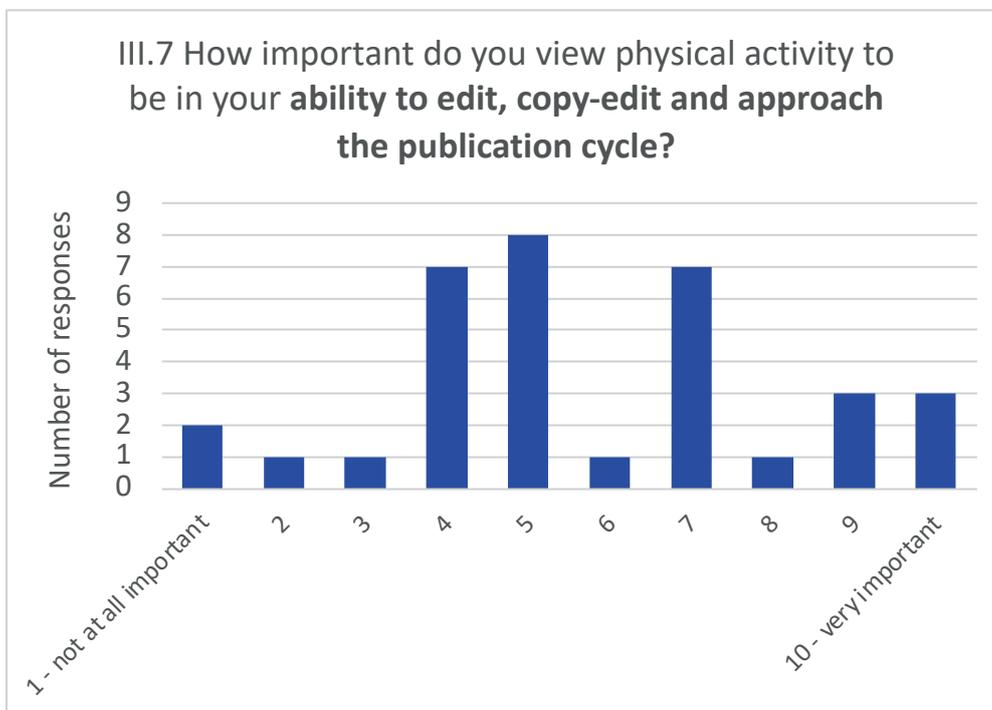


Figure 5. Question III.7 in 2018 Pilot Study.

From this, we can begin to surmise that these tasks, which could be designated as having less intrinsic creativity and taking place at a later moment in the conventional writing process, become disassociated from physical activity in the minds of the writers surveyed. This is strengthened by responses from our SGSAH Event, where creatives spoke of physical activity being of use as a way to “feed your creativity” or to sustain the “lightbulbs [which] flicker and flash at any time” (SGSAH Event 2021). Physical activity, in dealing with the administrative side of the writing life, is more often linked to general wellbeing, recuperation and rest. It is also tied to a need to change surroundings and move away from that desk-based environment. One of the respondents

to our survey noted that they “use yoga to switch my brain off from everything” and another that the “repetitiveness of the movement [when running] and the lack of intellectual pressure helps to destress and unclutter the mind” (Pilot Study 2018). Physical activity in these cases, then, isn’t so much an aid to creativity as a respite from the demands of that creative process. As the poet and essayist Kathleen Jamie has it, “If we work always in words, sometimes we need to recuperate in a place where language doesn’t join up, where we’re thrown back on a few elementary nouns. Sea. Bird. Sky.” (Jamie 2005: 93)

We arrive, therefore, at a model of a physically-active creative who uses physical activity as an aid

to creativity throughout the process but for whom that link, potentially, becomes weaker as the need for innovation and creative thought within their work decreases. However, physical activity still remains important – at that stage – as a means of maintaining general wellbeing and mental health. Indeed, when we asked our study respondents how important physical activity was to their general wellbeing and quality of life the mean score calculated was 9.29. This provides us with a template far removed from the sedentary creative and establishes the connection between creativity and physical activity, but it doesn't, perhaps, provide practical solutions or suggestions for how to integrate that physical activity into the writing routine. For that, we can investigate further the qualitative responses to our 2018 Pilot Study and SGSAAH Event.

At our SGSAAH Event, writer Kevin MacNeil drew a connection between a sense of achievement in physical activity and in writing or a creative project. He remarked that to “achieve a major endeavour like finishing a novel or running a half-marathon... it gives you confidence to do the other one” (SGSAAH Event 2021). This is certainly a linkage pointed to by Haruki Murakami in his book too (Murakami 2009: 10). But it is worth noting that the scale of the activity doesn't have to be completing a half-marathon or a similarly strenuous piece of exercise. At the SGSAAH Event it was noted that even the smallest or most incidental exercise was of benefit to creative work and, indeed, one of the participants espoused the virtues of dancing in the kitchen with her children as a form of physical activity which formed an important part of her daily routine: “Anything that comes from a place of not taking yourself too seriously is brilliant” (SGSAAH Event 2021). In this frame, it's important to note that doing any form of physical activity – and finding the motivation to do it – is beneficial to the creative practitioner. We preface our recommendations, therefore, with this caveat that we recognise that creatives will approach physical activity with different ‘baseline fitness’ and experiences with exercise and that increasing and diversifying that is beneficial to creativity whatever the starting point, even if only in decreasing the amount of time engaged in sedentary behaviour.

Recommendations

Many creatives who engaged with our study had innovative ways of ensuring that physical activity was integrated into the working day. Those responding

to our survey had routines including working “from my car, having driven to a remote location”, with a walk following this writing time, and going “to a café for a couple of hours, and where possible link up with a friend to co-work” (Pilot Study 2018). These solutions allow for respite from desk-based work and also allow for an integrated element of physical activity; after writing in the first scenario and on the walk to and from the café in the second. As mentioned in the introduction to this paper, the creative writing team at University of Stirling would regularly meet to cycle or walk as a group, with discussion of our teaching and indeed our own creative practice taking place alongside that activity. Perhaps the most interesting finding from the study, though, and the one that forms the first recommendation is just how prevalent and valuable even the smallest incidental physical activity was in the daily routine of the creatives we spoke with. In addition to the kitchen dancing mentioned above, we had discussion of “knitting”, “washing up”, “walk around the house”, “load the washing machine” (SGSAAH Event 2021). Our graduate students took this a stage further and spoke of the intrinsic link between the physical and the creative: “Musicians are often physically part of the process of making music – strumming, blowing, striking. And sculptors and artists can rarely create by being static” (ibid). For those creatives who are static – at a desk or similar – there is the option of “standing up as much as possible when writing” or to “sit on the floor or in different postures” (ibid). Even these seemingly small movements, at the light end of the intensity spectrum, contribute in the manner alluded to in Section Two by the WHO's ‘Every Move Counts’ campaign and ensures that the creative uses these ‘activity breaks’ to avoid sedentary behaviour. Our first recommendation, therefore, is to maximise these opportunities for short bouts of incidental physical activity; breaking up prolonged periods of sitting within the existing creative routine/ day by consciously incorporating and optimising opportunities for light exercise even if undertaking moderate-vigorous exercise at other points in the day.

It is possible to develop from this recommendation, however, and to consider whether different physical activities might provide a function or fulfil a specific purpose at distinct points in the creative process. This is where the FITT principles and the spectrum of intensity becomes very useful. Linking back to the creatives discussed in Section One, we can note

that some of the writers use light and moderate exercise to consciously think about a work-in-progress and others embark on a vigorous run or a cycle in order to gain respite from the creative endeavour. Identifying which activity is most useful and when in the creative process or routine it should occur, therefore, is of vital importance. For instance, within the survey, the mean score against the answer of whether physical activity was important for the 'ability to edit, copy-edit and approach the publication cycle' was relatively low, but there were seven respondents out of thirty-five who scored it nine or ten. For those writers, therefore, physical activity at that moment in their creative process was vital even if that wasn't the case for others. Similarly, we gave the example of Haruki Murakami and the link between physical activity and resilience, but there were several responses to our study which disavowed this link and instead pointed to "drinking wine" or "reading and spending time with friends" (Pilot Study 2018) as ways of coping with rejection and disappointment. Within this there is a clear disparity between one creative utilising vigorous exercise for resilience and others engaging in sedentary behaviour for the same purpose. Both choices are valuable for those particular individuals and, indeed, potentially vital for maintaining wellbeing. There is, therefore, no one-size-fits-all template to incorporating physical activity into the creative routine and the discussion in the opening two sections is helpfully augmented here by mention of the benefits of companionship when undertaking exercise, with the word 'social' or 'socialising' recurring frequently in our study. One of the graduate students interviewed at the SGSAH Event noted that much of their physical activity routine was "intimately built in with friendship" (SGSAH Event 2021) and this seemed a particularly important aspect to integrate within this research given our collective experiences of the pandemic; with daily exercise often doubling as social-time and interactions, at times, limited to outdoor activities. The second recommendation from our study, therefore, is to be mindful of FITT principles in guiding which physical activity can be most beneficial at different stages of the creative process and for different outcomes (whether for creativity or general wellbeing). It is also important to consider whether greater benefit will be taken from a solo or group activity. As one respondent phrased it: "I choose solitude or company based on which kind of thinking or non-thinking I need to do" (Pilot Study 2018).

Finally, much of the research cited in this article centres on the positive impact of physical activity on creativity and, indeed, on the ways in which the creative process can be integrated within the physical activity routine and vice versa. Physical activity can therefore be incorporated within a creative routine as a key element rather than an addition. Our respondents commented, for example, that "walking refreshes my eyes", "what is a struggle when sitting at a desk, becomes easy when walking" and "sometimes I take a notebook outdoors – if I'm stuck for ideas, for instance, need a change of scenery" (ibid). In this frame, physical activity becomes a vital tool within the creatives' toolkit; allowing them to gain new perspective, providing respite, and ensuring that they have the momentum and motivation to continue on with their creative work. Such a key element of the creative routine shouldn't be confined to the margins of the day or tacked on as an afterthought but should, instead, be nurtured and embraced as integral to the process of producing creative work. The third and final recommendation of this paper, then, is that physical activity shouldn't be thought of as a distraction from, or as taking time away from, creative endeavour but should instead be seen as time spent productively in nurturing creativity.

CONCLUSION

Through the publication of this paper and in forwarding the recommendations in Section Three, we hope to propose a template of a physically-active creative which is not necessarily prescriptive or directive but, instead, which allows for fluid incorporation of a range of physical activity practice into an existing creative routine or process. Within Sections One and Two there are specific type of activities and intensities of exercise discussed, but it is not our intention to argue for an adherence to a particular frequency, intensity, type or time (FITT). Rather, those principles help to guide the physical activity routine and to develop understanding of the ways in which physical activity can be harnessed as a benefit to creativity with reference back to the qualitative and quantitative data gathered from both our 2018 Pilot Study and our 2021 SGSAH Event. Our recommendations in summary: even short bouts of daily incidental physical activity are of benefit; FITT principles can be useful in guiding which activity is useful for different creative stages and outcomes; and physical activity should be thought of as part of creative routine rather than separate from it.

The research brings together two academics from very different disciplinary fields, in Creative Writing and Sport and Physical Activity, and begins to draw connections and posit recommendations based on our collected data and ancillary research, however we are aware that the interdisciplinary nature of the argument could potentially produce faultlines and inconsistencies. There are certainly myriad examples of creative thought within a Physical Activity and Sport context, as gestured to within Section Two, and a next step for this research might be to explore the ways in which creative writing or the creative arts could be of use in augmenting or developing sporting performance, resilience and wellbeing. As a research team, we would also like to engage in a

rigorous further study that allows us to draw nuance and definition into the type and intensity of activity which might be useful at different stages in the creative process.

Most of all, though, we would be keen to hear from creatives and academics who have tried to incorporate physical activity into their creative process and routine or whose thinking, in regard to this, has altered or developed as a result of reading this paper. Please do get in touch if the article has struck a chord or you would like to discuss further.

BIBLIOGRAPHY

- Belmont, JD. (2005) *The Art of Bicycling: a treasury of poems*, New York: Breakaway
- Burnett, EJ. (2019) *The Grassling: a geological memoir*, London: Penguin Random House
- Byrne, D. (2009) *Bicycle Diaries*, London: Faber and Faber
- Caspersen CJ, Powell KE, Christenson GM. (1985) 'Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research,' *Public Health Rep.* Vol. 100, No.2, pp.126-131.
- Cavallera, Guido M et al. (2011). 'Morningness-Eveningness Personality and Creative Thinking Among Young People Who Play Recreational Sport', *Home/ Social Behavior and Personality: an international journal*, Vol. 39 No. 4, pp. 503-518.
- Cracknell, L. (2014) *Doubling Back: Ten paths trodden in memory*, Glasgow: Freight Books
- Currey, M. (2013) *Daily Rituals: How Great Minds Make Time, Find Inspiration, and Get to Work*, London: Picador
- Deaton, P, Moore, K. and Wilkinson, B. eds. (2019) *The Result Is What You See Today: poems about running*, Sheffield: Smith Doorstop
- Ekelund, U et al. (2016). 'Does physical activity attenuate, or even eliminate, the detrimental association of sitting time with mortality? A harmonised meta-analysis of data from more than 1 million men and women', *The Lancet*, Vol. 388, pp. 1302-1310.
- Finlay, A. (2020) 'On Not Walking: Part II', London: Poetry Foundation, Available from: <https://www.poetryfoundation.org/harriet-books/2020/12/on-not-walking-part-ii> [accessed 14/09/21]
- Garavelli, D. (2021) 'Insight: Walking back to happiness after Covid lockdown', *The Scotsman*, Available from: <https://www.scotsman.com/news/people/insight-walking-back-to-happiness-after-covid-lockdown-3255286> [accessed 14/09/21]
- Gondola JC, Tuckman BW (1985) 'Effects of a Systematic Program of Exercise on Selected Measures of Creativity', *Perceptual and Motor Skills*, Vol. 60 No.1, pp.53-54.
- Gondola, J. C. (1986). 'The enhancement of creativity through long and short term exercise programs', *Journal of Social Behavior & Personality*, Vol. 1 No. 1, pp.77-82.
- Jamie, K. (2005) *Findings*, London: Sort of Books
- Jean Carroll, E. (1993) *Hunter: The Strange and Savage Life of Hunter S. Thompson*, London: Simon & Schuster
- Liptrot, A. (2016) *The Outrun*, Edinburgh: Canongate
- Murakami, H. (2009) *What I Talk About When I Talk About Running*, London: Vintage
- Oppezzo, M. and Schwartz, D. (2014) 'Give Your Ideas Some Legs: The Positive Effect of Walking on Creative Thinking', *Journal of Experimental Psychology*, Vol.40, No.4, pp.1142-1152
- Piggin, J (2020) 'What Is Physical Activity? A Holistic Definition for Teachers, Researchers and Policy Makers'. *Front. Sports Act. Living*. Available from: <https://www.frontiersin.org/articles/10.3389/fspor.2020.00072/full> [accessed

14/09/21]

Ripatrzone, N. (2015) 'Why Writers Run', *The Atlantic*, Available from: <https://www.theatlantic.com/entertainment/archive/2015/11/why-writers-run/415146/> [accessed 14/09/21]

Rominger, C., Fink, A., Weber, B. et al. (2020) 'Everyday bodily movement is associated with creativity independently from active positive affect: a Bayesian mediation analysis approach' *Nature*. Available from: <https://www.nature.com/articles/s41598-020-68632-9> [accessed 14/09/21]

Ryde, G. C., Brown, H. E., Gilson, N. D., & Brown, W. J. (2014). 'Are We Chained to Our Desks? Describing Desk-Based Sitting Using a Novel Measure of Occupational Sitting', *Journal of Physical Activity and Health*, Vol. 11 No.7. Available from: <https://journals.humankinetics.com/view/journals/jpah/11/7/article-p1318.xml> [accessed 14/09/21]

Solnit, R. (2014) *Wanderlust: A History of Walking*, London: Granta

Sprawson, C. (2018) *Haunts of the Black Masseur: the swimmer as hero*, London: Vintage

Steinberg et al. (1997) 'Exercise enhances creativity independently of mood', *British Journal of Sports Medicine*, Vol. 31, pp. 240-245

Strath et al. (2013). 'Guide to the assessment of physical activity: Clinical and research applications: a scientific statement from the American Heart Association.' *Circulation*. vol. 128, issue 20, pp: 2259-79

Tremblay, M.S., Aubert, S., Barnes, J.D. et al. (2017) 'Sedentary Behavior Research Network (SBRN) – Terminology Consensus Project process and outcome.' *Int J Behav Nutr Phys Act* Vol. 14, No. 75 .

Tuckman, B. W., & Hinkle, J. S. (1986). 'An experimental study of the physical and psychological effects of aerobic exercise on schoolchildren.' *Health Psychology*, Vol. 5 No.3, pp. 197–207.

'UK Chief Medical Officers' Physical Activity Guidelines', September 2019, Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf [accessed 14/09/21]

Warburton DER, Bredin SSD (2017). 'Health benefits of physical activity: a systematic review of current systematic reviews', *Curr Opin Cardiol*. Vol. 32 No. 5, pp.541-556.

'WHO guidelines on physical activity and sedentary behaviour', November 2020, available from: <https://www.who.int/publications/i/item/9789240015128> [accessed 21/02/22]

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