

Boxing, Myths and Reality Building in Sport for Development Programmes

Christopher R. Matthews, Ashleigh Hurrell, Thomas B. Oliver, Alex Channon

Abstract

The training regimes which are associated with boxing are thought to impart lessons in discipline that are particularly valuable for social groups often associated with the sport. This leads to a variety of sport for development programmes that seek to leverage this potential in one way or another. Research which is conducted on such programmes is often produced internally without academic support. We argue it is possible, and perhaps likely, for such research to evidence, justify and recreate sporting myths. To this end, we explore the allure and apparent utility of boxing as a sport for social development. We then consider how people involved in such programmes attempted to evidence their passionate beliefs in boxing's positive potentials. Rather than considering myths as being completely unfettered from objective reality, we have explored how they are part of an interactional process that can produce stubbornly persistent accounts of the world. We present this analysis as evidence of the ways that myths can become embedded in people's lives and, as such, must be conceptualised accurately, accounted for empirically and explored using considered research strategies. Our observations paint an awkward picture of the validity of the evidence-base upon which boxing programmes boasted of their success. That is, embracing personal biases and avoiding rigorous, critical research methods were being financially incentivised, with no external accountability for challenging pre-conceived ideas and *a priori* conclusions. Our concluding remarks situate these claims within ongoing ontological, epistemological and axiological debates which sport development scholars have developed.

...

For it is human history which converts reality into speech, and it alone rules the life and the death of mythical language. ... Mythology can only have a historical foundation, for myth is a type of speech chosen by history: it cannot possibly evolve from the 'nature' of things. ... Myth can be defined neither by its object nor by its material, for any material can arbitrarily be endowed with meaning (Barthes, 1993 [1972], 110).

Boxing, Myths, Reality Building and Symbolic Interactions

In framing myths as a product of human social history, Roland Barthes provides important theoretical tools with which to consider the social world as unfettered by connections to its immanent material reality. And there are empirical situations that require such semiotic arbitrariness to be drawn out. Atkinson and Monaghan, for example, draw attention to common myths of masculinity that bear only passing resemblance to men's actual lives: "while unflattering stereotypes and reality *sometimes* converge, the aforementioned depictions should be properly regarded as culturally circulating myths that typically bear little or no relation to empirical reality" (2014, 1). Here, to borrow Elias' term, the sociologist as 'the destroyer of myths', might come into

their own (1970). But when such myths appear to be connected in important ways to the real lives of people, a different way of tracing their impact is required; here the sociologist as ‘the explorer of myths’ comes to the fore, enabling us to read into the historical production and contemporary reification of such social stories.

Matthews’ work examining how stories manifest in routine behaviours in boxingⁱ is an example of such work (2019, 2020). Those that do ‘step up’ by stepping through the doorway into a boxing gym for the first time often have a well-developed, if mythologised, idea about what to expect in such spaces. Akin to Donnelly and Young’s (1988) notion of the ‘pre-socialisation’ of neophyte sports participants, they are then primed to expect a certain patterning of culture and with it, certain forms of learning (i.e., normative epistemological assumptions). This is a cyclical, historical, cultural and interpersonal process whereby myths guide people to the gym and, in so doing, *can* become a part of their own reproduction. In other words, myths become ‘real’ through the ways that people socially interact with them. Here, behaviours and performances within the gym act to establish, reconfirm and modify what boxers believe to be the (un)natural, (im)moral, (ab)normal ways of spending time inside and around the ring, and often in life more broadly (Matthews, 2014, 2016, Matthews and Jordan, 2019).

Woodward discusses a similar process in relation to the reification of stories of boxing’s heroes and legends (2006). In this regard, boxers’ *can* in part form their identities by weaving together heroic, valorised and (in)famous stories from the sport. Such identifications constrain and enable what ideas people can think with, which interpretations become possible and subsequently frame the way people orientate themselves to the world. In both these cases, the cultural heritage of boxing as a ‘hard man’s sport’ precedes, and acts to cast a conceptual shadow over, the nuanced and often paradoxical realities of life inside most gyms (Channon and Phipps, 2017; Jump, 2020; Paradis, 2012; Matthews, 2014, Tjørndal & Hovden, 2021; Woodward, 2006). Meaning that while evidence of more complex experiences is played out inside boxing gyms, the more obvious cultural signs still act to align with and reinforce simplified pugilistic stories. Here, those that re-confirm and re-establish boxing’s myths through their own actions are accepted and rewarded within the gym, providing an “illusion of fixity” (Matthews, 2016, 326) to these historical and cultural stories (Woodward, 2006).

In this way, the myths of the sport *can* become embedded within a gym’s mythos and substantiated in the bodies and behaviours of particular boxers. Once myths are given a real form (i.e., able to readily frame observable, documentable, bodily actions and dispositions) in this way, they exist as powerful evidence which people can highlight in order to further justify them. This process normalises (Matthews, 2016) and even naturalises (Matthews, 2014) such ideas and, in so doing, makes them available to others as symbolic tools to subsequently guide thoughts, beliefs and interactions. And it is here, to paraphrase the Thomas theorem, that myths become real in their consequences for the lives of those who live them out.

Notwithstanding the historical and cultural origins of myths, at its core this process of reality-building resides in people’s symbolic interactions with one another. Or as Blumer has it:

Symbolic interaction involves interpretation, or ascertaining the meaning of the actions or remarks of the other person, and definition, or conveying indications to another person as to how [they are] to act. Human association consists of a process of such interpretation and definition. Through this process the participants fit their own acts to the ongoing acts of one another and guide others in doing so (1966, 537-538).

Our preceding discussion of myths provided the symbolic ‘stuff’ that Blumer draws our attention to; in particular, it is these stories that provide the definitions, meanings and values by which people guide their actions with others. And within these interactions, we can find the recreation and remodelling of mythological ideas into normative behaviours. As Charmaz has it when discussing Robert Prus’ work, “to the extent that people reify their taken-for-granted shared definitions and mutual understandings, their intersubjective reality will gain the obdurate force of objective reality” (1996, xiii). It is key moments in the production of such reality that we focus on within this paper.

Sporting Myths, Combat Sports, and Sport for Development Programmes

If the ideas above are accepted, then a logical generalisation becomes possible: Myths should be understood as central to the construction of everyday life, and as such, it seems they *can* play a key role in how those involved in promoting, delivering and playing sport frame the social utility of such action. This framing aligns with Coalter’s discussion of the mythopoetic thought of ‘sport evangelists’. He suggests that “myths contain *certain elements of truth*, but elements that become refined and distorted and ‘represent’ rather than reflect reality. Standing for supposed, but largely unexamined impacts and processes” (2007, 9, our emphasis). And while a number of scholars have made similar claims in relation to sport, few have spent time exploring how this process plays out in the lives of sporting ‘insiders’. In this regard, sport development programmes provide an opportunity to access such people and to help empirically explore how myths might play out in their lives.

Sport for development (SfD) and sport for development and peace (SDP) programmes are of social scientific interest, not least because the aims and methodologies of such work is often closely intertwined with sporting myths. This might be in relation to national and international organisations who have, especially since the turn of the century, consistently and largely uncritically promoted the power of sport as a tool for social development (Coakley, 2015; Coalter, 2010; Darnell, 2010; Levermore, 2008; Hartmann and Kwauk, 2011). Or people like ‘Jonny’, as Mwaanga and Adeosun describe, who work within the ‘SDP temple’ and are so caught up in sports’ apparent positive potentials that the harsh reality of their own situation is accepted uncritically (2020). As Jay Coakley puts it, for those who are beholden to the ‘Great Sport Myth’, “there is no need to study and analyse sport critically, because it is already as it should be” (2015, 404). Thus, attempts to evaluate and research such programmes can focus on little more than anecdotal evidence. This leads Hartmann and Kwauk to argue that the trust in sport’s impact on social development is “driven mainly by heartfelt narratives, evocative images, and quotable sound bites of individual and community transformation, packaged and delivered more often than not by those running the programs” (2011, 285). There is then, plenty of opportunity for those singing from the same sports development ‘hymn sheet’ to believe, reconfirm and reify sporting myths; hence our interest.

Martial arts and combat sports (MACS) offer an example of this process. Within popular discourse it is often claimed that training in such activities develops valued attributes such as discipline and respect, echoing the often-assumed nature of sports ‘character-building’ qualities (see Theeboom et al. 2009). Despite important cultural and normative differences, this is as much the case with respect to participation in martial arts with self-defence orientations (Bäck and Kim 1982; Fuller 1988) as it is with more sportised disciplines such as boxing (Barrett et al., 2020). In particular, the rigorous training regimes which are often mandatory for competing boxers are thought to impart lessons in discipline that are particularly valuable for social groups often associated with the

sport – namely, men and boys drawn from lower socio-economic backgrounds, and/or those who are at increased risk of engaging in crime (Jump, 2020). Such notions may at times draw on various social stereotypes around gender, race and class within broader attempts to sketch out apparently positive social roles for MACS in relation to containing or reducing violence. Such notions often feature in popular advocacy promoting these activities to children and adults alike (see, for instance, Leslie 2008; Parsons 2013).

However, we argue that assumptions about the positive value of MACS in general, and boxing in particular, are very often misleadingly optimistic (Channon and Matthews, 2018). This scepticism is borne out by research that paints a more ambiguous picture of the social value of these activities; for example, while some scholars have shown that practising boxing can be a useful component of crime desistance programs (Deuchar et al. 2016; Jump, 2020; Wright 2006), other work has argued that despite such outcomes, there is an associated potential for existing criminal behaviour to exacerbated (Jump 2015, 2020). Meanwhile, some MACS practices may result in adverse psychological outcomes, both in terms of social psychological development (see Vertonghen and Theeboom 2010) and complications related to brain injuries – which are, of course, a concern in their own right (Erlander, 2013; Guterman and Smith, 1987; McCrory, Zeryan and Cameron, 2007).

These specific comments echo well-trodden general debates within the study of SfD and SDP programmes. For example, almost a quarter of a century ago Coakley argued that we should consider sports “as *sites* for socialisation experiences, not *causes* of socialisation outcomes’ (1998, 2). Around the same time, Taylor’s evaluation of programmes using sport to reduce criminal recidivism concluded that “all programmes agree that physical activities do not by themselves reduce offending. All agree that there are personal and social development objectives that form part of a matrix of outcomes” (1999, 50). Clearly then, scholars exploring the place of sport in the production of positive personal and social outcomes are aware of the complexities which underlie simplistic claims about participation in such activities (see Coalter, 2007; Crabbe, 2000; Darnell, 2012; Hartman, and Kwauk, 2011; Kidd and Donnelly, 2007; Lindsey, et al, 2017; Nichols, 2007; Spaaij, 2011).

Within this paper, we add to such understandings by empirically fleshing out our theorising of myths within the accounts of those involved in SfD programmes in the sport of boxing. Specifically, we analyse the ways in which myths become central to the substantiation, justification and continuation of such programmes. We conclude by connecting the findings with SfD literature which helps us outline how our analysis might contribute to epistemological, axiological and methodological debates that are ongoing in that discipline. Before turning to our findings, we outline the method used for this investigation.

Method

This research was conducted primarily by the second and third authors during the spring of 2020 while they were employed on temporary research associate contracts at Nottingham Trent University. The lead author conducted some follow up interviews to aid in clarifying conceptual issues. Initially, this project set out to gain an overview of sports-based programmes (not specifically boxing) that aimed at reducing violence and/or developing anti-violence educational initiatives and agendas. To help generate more participants, this focus was somewhat widened to include projects that had broader outcomes in line with community and social development through sport. The overarching

research questions were: who is using sport to reduce violence; how is this being done; and what can be learned to help enhance future work in this direction?

For the purposes of the present paper, being concerned primarily with boxing, the data used below were drawn from those projects which were connected to boxing clubs and/or employed boxing as the prime sporting focus. There were 37 representatives (included coaches, programme organisers and club managers) from programmes across England who were interviewed either face-to-face or using video conferencing software. We use pseudonyms when presenting this data, and certain other identifying features have either been removed or modified to protect anonymity. We tried where possible to describe our participants' job roles in relation to the sports programmes using the terminology they employed.

The second and third authors were also employed in sports development roles. Their work in this regard was important for the efficient delivery of the project within the allotted time (approximately 13 weeks). They had access to people working 'at the coalface' of sport development, and they were readily accepted as a part of this community. These prior relations helped participant recruitment, establish some level of rapport, and ensured they had knowledge of the jargon, catchphrases and buzzwords which were commonly used in the field. They also had detailed knowledge of the practical constraints and policy limitations that are typically experienced by those leading SFD programmes.

With that said, their roles in sport may have resulted in participants assuming there was an evaluative nature to their questioning (i.e., they were trying to find out if the programmes were effective or failing in some regard) and that this could in some way affect current and future funding. While every effort was made to avoid such misinterpretation of the process, through thorough participant briefing, it is a distinct possibility that this remained. If this or similar processes did shape the ways the participants responded this must be considered when assessing the data and our subsequent analysis. This might have led to a certain emphasis given to a retelling of traditional stories about sports' apparently positive role in society; narratives upon which much of the sport development sector is built. Notwithstanding such caution, we are confident that the participants spoke with a clear understanding of the anonymity our ethical procedures afforded them.

Interviews ranged from 18 to 125 minutes and averaged 55 minutes. Recordings of the interviews were transcribed verbatim and analysed during regular meetings of the research team. This process was informed by Blumer's discussion of 'sensitising concepts' (1969); Prus captures our use of these ideas neatly:

Blumer uses the term sensitising concepts to refer to these tentative, analytical notions. Sensitizing concepts suggest subsequent lines of inquiry and assessment, but in each case the researcher has the obligation of making the concept match up with the circumstances at hand rather than making the data fit the concept (1996, 132).

In this regard, Blumer encourages scholars to ensure a thorough interaction between their academic ideas and data (for a fuller discussion see Matthews, 2021). The second and third authors reviewed the data they were producing and attempted to find recurring themes which could usefully address several empirical issues and theoretical ideas. The first author largely acted to encourage clarification over the use of concepts and data; this often took the course of lengthy discussions where the limitations of both were reflected

upon. This process highlighted various conceptual and empirical puzzles which we felt could be neatly addressed by the data that was being collected.

In this paper, we have drawn together sections of the data that help explore the process by which myths can become embedded into the reality of people's understanding of the world around them. While data was still being collected, the first author sought out the conceptual tools which have been discussed above; these ideas were considered and refined in relation to data in conjunction with the other authors. This was a recurring process that happened across the length of the project, continued for some months after and has been refined further during the process of addressing peer review comments on earlier drafts of this paper. In particular, this focused on the apparent allure and utility of boxing for social development. Our discussion of this in the next section provides further theoretical exposition and acts as an important context for the remaining analysis. This was a 'subsequent line of inquiry' which we did not anticipate at the start of the project. Instead, our ideas around the importance of this topic developed as the first author repeatedly encouraged the second and third authors to explore how the participants justified their apparent beliefs in boxing's transformative potential (more on this in what follows). This led us to the main empirical thrust of this paper which focuses on how myths might be evidenced and as such, *became real*. It is upon this iterative and spiralling process of reading, data collection, collaborative analysis and further reading, that our findings are built.

The Allure and Utility of Boxing for SfD Programmes

When taken in its most infamous, Westernised and spectacularised forms, boxing is a sport of storytelling. Whether it be The Rumble in the Jungle, Raging Bull, Muhammad Ali or Rocky's comeback(s), the fictional merges with the real in a swirling cultural history. Kath Woodward, drawing on Chandler's *Anthology of Boxing and Visual Culture* (1987), captures this neatly in her discussion of public and personal stories:

Personal stories told in the gym elide with the public representations expressed through media stories and the images and mythology which permeate the sport at all levels. ... The myths and legends of boxing provide both stability and excitement in creating a sense of location as well as security (2006, 91).

Here Woodward highlights how particular stories, and the lives of boxers, become necessarily intertwined with historically and culturally produced pugilistic storytelling. Specifically, this process provides a sense of clarity and confirmation for those who consider themselves to be boxers or boxing insiders.

Data confirming key parts of how such stories articulate with the reality of lives lived out inside and around the ring are now commonplace (Boddy 2009; Heiskanen 2012; Jefferson 1996; Lafferty and McKay 2004; Mennesson 2000; Paradis 2012; Sugden 1996; van Ingen 2011; van Ingen and Kovacs 2013; Wacquant 2004; Lee 2009; Wright, 2020, also see previously cited literature on boxing). Most of this research targets the 'identity work' boxers do in line with constructions of gender, race and class. We focus instead on how elements of boxing's mythologies are understood in relation to the sport's supposed ability to bring about (positive) social and personal change. We begin to do so by exploring the particular allure of boxing in this context – that is, the belief that it has the ability to reach those which other sports and social programmes cannot reach; to 'engage the disengaged'. This aligns with well-trodden discussions in SfD and SDP literature, that sport is a 'hook' which can secure an audience and thus help bring about (non-sporting)

developmental outcomes (see Coalter, 2010; Darnell, 2010; Levermore, 2008; Hartmann and Kwauk, 2011). We use the following retelling of this story as an empirical foundation for the rest of our analysis.

All our 37 participants were convinced of boxing's appeal along these particular lines. The following interview extracts are emblematic of this finding:

We used boxing as the tool to engage with the community because as you know Boxing has got good 'street cred' and a lot of young people want to get involved in that sort of life. Boxing has got a bit of 'street cred' so they can flow into it a bit easier [than other sports] (Gary, programme coach, 50s, former boxer, 20+ years as a coach).

Boxing is one sport and it's not a sport for everyone. If we'd done football, we might have got more [participants]. But it was the chosen sport and we thought it might break down the barriers. It's a cool sport, it's a tag. You can break that culture if you're in a gang and you say 'I'm going to run to my boxing club' it's socially accepted. If you turned round and said you were going to play doubles [tennis] in the park you'd get laughed at. Any sport is terrific, but it might not be accepted (Alex, programme organiser, 40s, police officer, 10+ years involvement).

There needs to be that wider acknowledgement across the board, [boxing] engages with people like nothing else can. You can change a life through being involved, doesn't matter what it is (Simon, programme coach, 40s, former boxer, 20+ years as a coach).

Boxing, then, appears to provide 'the hook' that initially 'catches' hard-to-reach young people (also see Jump, 2020). Alongside this, the sport was equally understood as an effective means of enabling wider messages and interventions to be delivered to participants. This utility of the sport was returned to several times by those who run boxing programmes:

We work with the community using boxing as a tool to help young people and adults using discipline of the way boxers and their lives and use it in a positive way. 75% of all our work is non-contact boxing and again using the discipline of the way boxers train and their life (Luke, programme lead, 50s, former boxer, 20+ years as a coach).

So, every single session, we're there doing the boxing and then we'd sit down and do a topic, so knife crime etc. Also, on top of that we did take them to the medical and legal centre. We then had the mortuary manager talk to them about who gets left behind and show them what their family would go through there (Chris, programme organiser, 40+, 10+ years involvement).

The message was if you knuckle down not only in the gym but at school it can lead you down the right path. Now we did that with Northumbria Police, the council supported it, we did a lot of work with [another local SDP programme]. What it was, it was a 30-minute session before they came in the gym, it was themed each week, so one was knife crime, but it was also arson, the police did some stuff. After those sessions they went in the gym (James, programme organiser, firefighter, 40s, 10+ years involvement).

Focusing on these non-sporting messages and outcomes demonstrated that those involved in developing SfD programmes did not simply assume that engagement in the

sport was enough, in and of itself, to realise desired outcomes (see Coakley, 1998; Taylor, 1999). In recognising this, our participants' practical engagement with boxing aligned with our previous recommendations that a considered and contingent approach is required when developing sporting programmes which intend to bring about positive social change (Channon and Matthews, 2018).

Explicit attention to non-sporting outcomes might be expected of those running training programmes designed to achieve more than simply increasing sport participation or enhanced competitive performance. Yet, there was still some evidence of the belief that simply doing boxing could have a positive outcome; "If you can get someone boxing or something like that it can be life changing" (John); "I really do believe this could be a national thing where every town who has a boxing club could help sort out a lot of society's problems. Young people hang on our every word" (Luke). In this way, despite the nuance noted above, boxing was sometimes understood as an intrinsically powerful tool that could achieve certain development goals by itself.

Each participant in the study was asked how they measured their successes and if they could substantiate their claims. The answers to these questions will be discussed in what follows, but it is useful to note at this point the passionate, animated and vibrant ways that interviewees spoke about their conviction to the idea that boxing could reach parts of society that other sports could not. Despite what we outline below as fundamental shortcomings in their ability to evidence such claims, the participants almost always communicated belief in them in a clearly impassioned manner. While we do not present these assessments of participants' mood and attitude as evidence to support their claims and acknowledge the difficulty of representing this in written form, we argue that they reveal an important observation upon which we build the rest of our analysis: that our participants appeared to be 'true believers' in the power of boxing to effect positive social change.

Evidencing the Myth: Anecdote

Throughout this study we were interested in exploring where the strength of such convictions came from. We knew from previous research that boxing's myths and stories might be recreated and lived out inside and around the ring in the individual performances, identities and bodies of boxers. But what interested us was how a similar process might work out for those running boxing SfD programmes. So, taking as our starting point that some level of justification was required to support our participants' beliefs, we pushed them to provide substantiation.

A common way to address this line of questioning was by describing the mechanism which was thought to create these positive experiences:

Focus, discipline and like I say a confidence, not an overconfidence, but to sort of see situations and get you out of situations, just to have that air where you could turn round to someone and say, 'no'. (Adam, 40s, club chairman and coach, former boxer, 20+ years involvement)

Such discipline and self-confidence was usually thought by the participants to result in observable, positive changes in the ways young people interacted with others. And Simon told us the following in relation to how he thought his programme worked, "if you give a kid hope, they get some aspiration, they get a chance, once they get that chance, they start making the correct choices".

This data is not presented as evidence to support the veracity of our participants' analysis regarding boxing's transformative power, but instead highlights how they themselves explained and rationalised it. Calls to these mechanisms provide a subculturally coherent and epistemically logical way of making sense of – or in Woodward's (2006) words, provide stability for ideas about – boxing's positive potential. Thus, boxing's myths were provided with a meaningful and rational mechanism of action which could then be used to explain, justify and normalise them.

Aligned with these abstract and somewhat simplistic mechanistic explanations were our participants' calls to powerful, anecdotal case studies. We think it is at this point that the processes we have theorised at various parts of this paper become increasingly apparent. Specifically, they provide articulations of the ways in which the myths of boxing become recreated in the real lives of people involved in the sport. Here, we can find the process of reality building, whereby myths and personal experiences, expressed via anecdotes, mutually reinforce each other. The following are the kinds of stories we were told by many across the sample:

I heard from a teacher that someone who comes to our club had a lad try and pick a fight with him, and what he did was, walked away! I think before he'd started boxing, he would have just gone in there, but he walked away. When the teacher asked him why he said "I've got the skills, I've got the fitness and I know it's better to walk away. I've got that confidence and that discipline". That summarised what boxing can achieve. (Ollie, programme organiser, 50s, former boxer, 20+ years involvement as a coach)

There was a young person in court for a very serious offence actually. He got taken into custody but then he completed a programme at the gym and once we'd demonstrated his progress to the court, he got a reduced sentence. He had a young baby, he wasn't using drugs anymore, actively looking for work and was in no further trouble. (Chris)

There was one lad, the police had some really significant problems with him in the past, with acts of crime and at the start he was very disruptive, didn't want to engage with us. We tried a load of different techniques and by the end you would not believe it. He was one of the ones for me I thought he'll come the first week and we'll never see him again. He was one of the ones that was telling the others to stay quiet, and he was one of the ones who was driving it. (Harry, programme organiser, 40s, former boxer, 10+ years involvement)

By referring to these isolated cases, the participants were able to neatly confirm notions of boxing as a sport that can engage the disengaged and bring about seemingly miraculous transformations. The dramatic nature of such success stories helped them stand out for our participants as undeniable facts of the power of boxing. And while we certainly do not deny these cases took place, and in some respects might even be commonplace (i.e., hold a veracity that speaks well to Coalter's 'elements of truth'), anecdotes fall some way short of evidencing the sport's potential in anything but those specific cases. Indeed, it is telling that when asked to evidence the power of boxing to change young people's lives, Harry tacitly acknowledges 'the ones' who drop out and never return; those who, evidently, boxing fails to reach. That such 'ones' are only mentioned in anecdotes such as Harry's as a foil against which to celebrate those who *do* successfully evidence boxing's value is telling, as it illustrates the different importance attached to cases which do and don't succeed in substantiating boxing's myths.

In this regard, the anecdotes evident here confirm descriptions of methodological issues often encountered in the evaluation of SfD programmes (Coakley, 2011, Chawansky, 2015; Hartmann and Kwauk, 2011; Harris and Adams, 2016; Kay, 2012; Jeanes and Lindsey, 2014; Smith and Waddington, 2004; Spaaij et al 2018). Not only are they highly selective and partial accounts, but they fail to acknowledge wider factors in participants' lives. Rather than being a product of involvement in boxing *per se*, these positive stories could just as well be evidence of young people's personal development away from the sport. For example, their behaviours could have changed as a part of growing older or changing social groups at school, or myriad other reasons that are more-or-less disconnected to the specifics of boxing.¹¹ However, such an interpretation would not have aligned with, or worse still could undermine, boxing's mythological potential to transform. And so, the sport's role remains privileged in the discourse constructed by the interviewees.

What is more, the people delivering the programmes had often shared their own, personal experiences that further referenced boxing's myths. These stories combined with other anecdotes and the subcultural logic of the sport's transformative nature in a mutually reinforcing manner. Alex's story was a good example:

My personal story is that I am a sibling of prolific offenders, my brothers and my Dad went to prison, I could have easily gone down that path. At the time what straightened me out was boxing. My sport friends. I grew up on a housing estate in London, I had friends that would do naughty stuff but I also had my friends who did sports and I ended up gravitating towards them because I enjoyed it more.

It is within such accounts that our participants provided dramatic personal evidence to support their belief in the positive power of boxing. There's something approaching a lay empirical triangulation here, in that multiple points of observation neatly reinforce each other. However, this alignment, we argue, is most adequately understood as an artefact of the mythological lens which our participants use to interpret their 'data' than it is methodologically rigorous evidence pointing to boxing's positive causal effects.

Within what precede there are several distinct parts in a process that Matthews (2016, 2019) draws attention to: that mythologised ideas about boxing can act to shape people's thoughts about the sport and, that when this happens, they are somewhat primed to accept and live out such myths. By acting as a signpost for what to expect to find, these myths produce something of a sample bias, for within such a group we would expect to find a willingness and perhaps eagerness to see, experience and reconfirm the historical foundation of myths (Barthes, 1993 [1972]) within symbolic interactions which build meaning and reconfirm values (Blumer, 1966, 1969).

Evidencing the Myth: Data Gathering

While our participants largely drew on these personal and anecdotal case studies to shore up their beliefs about the sport, there were several programmes that seemingly had a more sophisticated methodology for substantiating similar claims:

We'd had [over 200] kids through in Manchester and a retention rate of 85% which is really good. There's only one kid that's gone back into the criminal justice system that we know of. But to be fair to him, he was already in the system and he was already awaiting trial when he started the programme and his behaviours had changed so significantly that when he went to court he got a reduced sentence because of the work he'd been doing. (Simon)

On a day-to-day level we use [a monitoring and evaluation management system] which gathers a lot of data for us and they'll have their annual reports, so they keep in touch with us and you keep feeding back. We have grant officers that we work with, we're quite used to that as we work with a variety of different funders, so we're used to that. (John, 40s, programme organiser and coach, former boxer, 10+ years involvement)

We did some documentaries which kept the funders really happy. There was general [funder generated] data collection which is just how many hours they'd done. Others were similar to that. We did case studies on individuals. Why they'd come to us, what they did, how they turned around and weren't committing crime. We also did research on how anti-social behaviour was reduced in that area. Just to justify what we did. It was basic data capture really that was all that was ever asked of us, and we did the case studies and the films. (Alex)

While these programmes collected more data, it was not clear to what degree this process was informed by a considered methodology or the involvement of professional or academic (i.e., trained, experienced, critically reflective) researchers. Instead, the collection of data – whether in terms of numbers of participants, hours logged in the programme, participant demographics or qualitative, 'case study' stories – seemed to be led primarily by funders' requests for information rather than scientific rigour (for broad discussions on this theme see Harris and Adams, 2016; Kay, 2012; Jeanes and Lindsey, 2014).

In this regard, data gathering was engaged in primarily as a requirement, either perceived or actual, of financial support, instead of the basis from which empirically robust conclusions and subsequent recommendations for practice could be constructed. Some participants even described their research endeavours as explicitly driven by a desire for case-study based, positive narratives and anecdotes, rather than more methodologically rigorous and broadly generalisable findings:

These kids are from deprived backgrounds and there's some rough history there so why Sport England have backed this is that we've been able to produce some lovely success stories and in that we've got people who come down to the main club now. You can't get them out of there to be honest! You can't get them to leave. (Ollie)

I'd say a lot of funders have gone away from the numbers thing [i.e. participation statistics]. They're not as fussed about numbers. The lottery have told me recently they don't really care about the numbers and they are one of our big funders. They are less bothered about numbers and more bothered about stories, what they want to know is about what it's doing. (John)

The clubs will deliver the case studies. Because they're getting quite a bit of money. So, each club is getting an individual agreement of what they need to report back. We need to evidence how powerful this is. We want it to be a permanent programme. So, we need to bank as much evidence as we can and eventually, we can hit the big funders and get funded for 10 years. (Simon)

Thus, the structure of the programmes' funding guided the data that was collected. This process aligned with the construction of simplified, emotive success stories, rather than providing contingent, complex and perhaps contradictory evaluations of the programmes – a methodology which is more-or-less primed to reconfirm myths rather than trace their manifestation or critically evaluate their veracity.

When taken together, the preceding arguments demonstrate several connected issues. Firstly, although we can't make definitive generalisations, it appears from our sample that 'true believers' (in Coalter's words, 'sports evangelists') play a central role in organising and delivering programmes which use boxing – a sport we have argued is replete with mythological beliefs – to produce social and personal development outcomes. Secondly, the 'evidence' demonstrating the success of such programmes was largely based on simplistic mechanisms, individual anecdotes and personal experiences. Despite quite clear evidentiary weaknesses, this data acted to rationalise and substantiate our participants' beliefs about boxing's specific transformative potentials, in line with myths that commonly circulate about this sport. And thirdly, rather than simply being an expression of cherished myths held by programme organisers, this process was reinforced by the requests from project funders for 'success stories' to justify their investment in the programmes concerned.

These three observations paint an awkward picture of the validity of the evidence-base upon which boxing SfD programmes boasted of their success. That is, embracing personal biases and avoiding rigorous, critical research methods were being financially incentivised, with no external accountability for challenging pre-conceived ideas and *a priori* conclusions. Essentially, boxing's value for combating various social ills and changing lives was a foredrawn conclusion, precluding the possibility that any SfD programme could fail to realise these claimed outcomes – myths made real.

When elements of this critique were presented to our participants in response to the kinds of evidentiary claims they made, they could often see some of the problems we were highlighting:

If you are going to rely on the clubs on the ground [to send in data for funders] it needs to be really simple and not just be reams of numbers about who showed up and didn't show up, it doesn't mean anything. (Jimmy, 30s, coach and programme manager, former boxer, 10+ years of involvement)

Yeah, it was a pilot and being self-critical, the monitoring and evaluation was probably not rigorous enough to show any major, real successes. Having said that the qualitative data did show that it had had an impact. (Andrew)

In acknowledging these issues, our participants stopped some way short of accepting that their thoughts might be connected to the recreation of myths, or that myths were a central part of the reality they had built in relation to sport. In this regard, we expect our participants would challenge the analysis we have presented in this paper. But such a challenge would largely not be cognisant of 1) the conceptual work we have outlined which places myths as a constructive feature of their symbolic interactions and 2) the epistemological limitations of the evidence base they draw on to confirm their beliefs.

When pushed about the need for more considered evidence to back his claims, Andrew neatly captured our critique in this regard:

I think it should be primarily on the funders really because my personal opinion on 'sport for development' is that it should be a socially funded venture and it shouldn't have to justify itself. It should just be invested in and organisations who are doing the work, should just be able to do the work, and not have all the bureaucracy attached to it. *It's clear that it works*, if we want additional research then that should be on the funders' heads to do. (Andrew)

Andrew is echoing Levermore's finding that sporting evangelists take as their start point that "sport for development inevitably leads to positive outcomes" (2011, 341). In this regard, if one is a 'true believer' in sport's mythologies then evidence becomes largely superfluous to your world view, and instead simply becomes a requirement of continued funding – or in other words, a bureaucratic exercise devoid of face-value merit.

This 'evangelistic ontology' appears from our work to be a common starting point when considering the benefits of Sfd programmes. In the same way that religious zealots require little or no proof of the existence of their God(s), neither did our participants require rigorous evidence, and sometimes disregarded the need for it all together. Instead, case studies and personal experiences that neatly resonated with boxing myths provided evidence which confirmed these boxing insiders' ways of seeing the world, and in this way, myths became stubbornly built into their reality. And it is upon this reality that it appears such programmes, their apparent successes, and their access to funding are reproduced.

Concluding Remarks

Throughout this paper we have drawn together conceptual tools from various sources to help examine how we can understand the 'elements of truth' that Coalter (2013, 21) highlights are embedded in myths about sport. Rather than considering myths as being completely unfettered from objective reality, we have explored how they are part of an interactional process that can produce stubbornly persistent accounts of the world. We have then contributed to theoretical discussions around how myths can shape the lives of those who believe them. And while this is an academic contribution which we are happy to make, there are some important practical implications of our work that we would like to spend the rest of the paper drawing readers' attention towards.

An overly simplistic reading of our paper could conclude we are suggesting our participants are simply living in a make-believe world. Instead, we present this analysis as evidence of the ways that myths can become embedded in the reality of people's lives and, as such, must be conceptualised accurately and accounted for empirically. In this sense our work provides a parallel contribution by adding empirical and explanatory detail to ongoing debates within Sfd and SDP research, concerning key ontological, epistemological and methodological limitations of research on sport development programs (also see Coakley, 2011; Chawansky, 2015; Hartmann and Kwauk, 2011; Harris and Adams, 2016; Kay, 2012; Jeanes and Lindsey, 2014; Smith and Waddington, 2004; Spaaji, et al, 2018). Let us explain by briefly reconsidering what we have evidenced:

1. The belief that boxing (and by inference sport more broadly) offers a means of providing positive personal and social outcomes, is so deeply held by certain people that robust evidence is not required for them to confirm their belief in it, and
2. That funders appeared to reinforce this process by asking for stories of success (alongside some basic quantitative data) as their main source of evidence.

A further logical conclusion which we feel feeds into this analysis is that:

3. Providing more nuanced and critically-minded evidence would require a complex and (probably) expensive research methodology that most people who are running sport programmes are not able to develop or conduct, but which also may not occur to them as necessary or desirable, particularly given its potential to

destabilise the (financially incentivised) recreation of myths that anecdotal evidence supports.

Based on these points we follow our colleagues who have argued for a more considered understanding of evidence and knowledge (Harris and Adams, 2016; Jeanes and Lindsey, 2014; Kay 2012). Here, Jeanes and Lindsey outline ways of helping those working in SfD and SDP to reconsider “what evidence is required, for whom, to serve what purpose and how this evidence is collected in practice” (2014, 212).

We agree with scholars who have problematised the often unconsidered and potentially fetishistic search for upgraded monitoring and evaluation (M&E) as the panacea to prove the value of SfD and SDP programmes (Harris and Adams, 2016; Jeanes and Lindsey, 2014; Kay, 2012). And we also agree that sporting practitioners who are ‘at the coalface’ of such programmes, people we have described at various points in this paper as ‘true believers’, should be involved in attempts to understand, evidence and account for SfD’s role in personal and social development (see Nicholls, et al, 2010; Jeanes and Lindsey, 2014; Kidd, 2011). Afterall, our critical observations do not change the fact that it is those who are so deeply immersed in sport that have the best access to the people they’re trying to positively effect.

In posing such pragmatic, epistemological and axiological questions of the SfD community Jeanes and Lindsey and others (Chawansky 2015; Harris and Adams, 2016; Kay 2012; Spaaij, et al 2018) are pushing at foundational assumptions, and as we’ve demonstrated sometimes myths, which are deeply rooted in the field. Here, the legacy of simplistic readings of “sport as good” and of research being capable of unproblematically revealing objective answers about such ‘goods’ can be challenged. A key part of what we’re imagining here is a project design that would be able to efficiently trace the ontological and epistemological origins of sporting myths. And doing so in a trusting way, researchers and SfD community members would be able to think together, using a genuinely dialogical methodology, about what counts as evidence for their work and the values that are embedded in such a process. This would help avoid the simplistic and somewhat shallow reporting of stories of success we have evidenced using our methodology, which largely draws on limited empirical snapshots. In effect, the weakness of our relatively detached method helped us explore sporting myths and draws attention to the importance of developing critically minded community-based immersive research strategies which can work to reconsider the way SfD programmes are understood, developed and justified.

References

Bäck, A. and Kim, D. (1982) Pacifism and the Eastern martial arts. *Philosophy East and West*, 32(2), 177-186.

Barthes, R. (1993 [1972]) *Mythologies* (Trans. J. Cape). Reading, Cox and Wynman.

Barrett, D., Edmondson, L., Millar, R. and Storey, R. (2020) Evaluating the impact of boxing clubs on their host communities. Report published by England Boxing, available: <https://www.englandboxing.org/wp-content/uploads/2020/06/Final-pdf-workforce-research.pdf> Accessed 27/12/2021.

Blumer, H. (1966) Sociological Implications of the Thought of George Herbert Mead. *American Journal of Sociology*, 71, 535-48.

- Blumer, H. (1969) *Symbolic Interaction – Perspective and Method*. Berkeley, CA, University of California Press.
- Channon, A. and Matthews, C.R. (2018) Love fighting hate violence: An anti-violence program for martial arts and combat sports. In: Carter T.F., Burdsey D. and Dodge M. (Eds.) *Transforming Sport: Knowledges, Practices, Structures*. Abingdon, Routledge, 91–104.
- Channon, A. and Matthews, C.R. (2021) Communicating consent in sport: A typological model of athletes' consent practices within combat sports. *International Review for the Sociology of Sport*, Online first.
- Channon, A. and Phipps, C. (2017) Pink gloves still give black eyes: Exploring 'alternative' femininity in women's combat sports. *Martial Arts Studies* 3, 24–37.
- Coakley, J. (1998) *Sport in Society: Issues and Controversies*. 6th Ed. Boston, MA, McGraw-Hill.
- Coakley, J. (2011) Youth sport: What counts as 'positive development?' *Journal of Sport and Social Issues*, 35, 306-324.
- Coakley, J. (2015) Assessing the sociology of sport: On cultural sensibilities and the great sport myth. *International Review for the Sociology of Sport*, 50(4-5), 402–406.
- Coalter, F. (2007) *A Wide role For Sport: Who's Keeping Score*. London, Routledge.
- Coalter, F. (2010) The politics of sport-for-development. Limited focus programmes and broad gauge problems? *International Review for the Sociology of Sport*, 45, 295-314.
- Coalter F. (2012) 'There is loads of relationships here': Developing a programme theory for sport-for-change programmes. *International Review for the Sociology of Sport*, 48(5), 594-612.
- Chawansky, M. (2015) You're juicy: autoethnography as evidence in sport for development and peace (SDP) research. *Qualitative Research in Sport, Exercise and Health*, 7(1), 1-12.
- Charmaz, K. (1996) Foreword. In Prus, R. *Symbolic Interaction and Ethnographic Research – Intersubjectivity and the Study of Human Lived Experience*. Albany, NY, State University of New York.
- Crabbe, T. (2000) A sporting chance? Using sport to tackle drug use and crime. *Drugs-Education Prevention and Policy* 7(4), 381–391.
- Crabbe, T. (2008) Avoiding the numbers game: Social theory, policy and sport's role in the art of relationship building. In, Nicholson M. and Hoye R. (Eds.) *Sport and Social Capital*. London, Elsevier, 21–37.
- Darnell, S.C. (2010) Power, politics and "sport for development and peace": Investigating the utility of sport for international development. *Sociology of Sport Journal*, 27, 54-75.

Darnell, S. C. (2012) *Sport for development and peace: A critical sociology*. Manchester, Manchester University Press.

Darnell, S.C. and Dao, M. (2017) Considering sport for development and peace through the capabilities approach, *Third World Thematics: A TWQ Journal*, 2:1, 23-36.

Deuchar, R., Sjøgaard, T.F., Kolind, T., Thylstrup, B. and Wells, L. (2016) 'When you're boxing you don't think so much': Pugilism, transitional masculinities and criminal desistance among young Danish gang members'. *Journal of Youth Studies*, 19(6), 725-742.

Donnelly, P. and Young, K. (1988) The construction and confirmation of identity in sport subcultures. *Sociology of Sport Journal*, 5(3), 223-240.

Elias, N. (1970) *What is Sociology?* Columbia, Columbia University Press.

Erlanger D.M. (2013) Exposure to sub-concussive head injury in boxing and other sports. *Brain Injury* 29(2): 171-174.

Freire, P. (1970) *Pedagogy of the Oppressed*. New York, The Continuum International Publishing Group Ltd.

Freire, P. (1993). *Education for Critical Consciousness*. New York: Seabury Press.

Fuller, J. (1988) Martial arts and psychological health. *The British Journal of Medical Psychology*, 61(4), 317-328.

Guterman A. and Smith R.W. (1987) Neurological sequelae of boxing. *Sports Medicine* 4(3): 194-210.

Harris, K. and Adams, A. (2016) Power and discourse in the politics of evidence in sport for development. *Sport Management Review*, 19, 97-106

Hartmann, D. and Kwauk, C. (2011) Sport for development: An Overview critique, and reconsideration. *Journal of Sport and Social Issues*, 35, 284-305.

Heiskanen, B. (2012) *The Urban Geography of Boxing: Race, Class, and Gender in the Ring*. London, Routledge.

Jeanes, R. and Lindsey, I. (2014) Where's the "evidence?" Reflecting on monitoring and evaluation within sport-for-development. Young, K and Okada, C. (Eds.) *Sport, Social Development and Peace: Vol.8*. London, Emerald Group Publishing

Jump, D. (2015) Fighting for change: Narrative accounts on the appeal and desistance potential of boxing. *ECAN Bulletin*, 26, 10-15.

Jump, D. (2020) *The Criminology of Boxing, Violence and Desistance*. Bristol, Bristol University Press.

Kay, T. (2012) Accounting for Legacy: The role of monitoring and Evaluation in sport in international development. *Sport in Society*, 15, 888-904.

- Kidd, B. and Donnelly, P. (Eds.) (2007) Literature reviews on sport-for-development. Toronto, Toronto University.
- Kidd, B. (2011) Cautions, questions and opportunities in sport for development and peace. *Third World Quarterly*, 32, 603-609.
- Leslie, C. (2008) 'Boxing is the best way to stop violence in kids'. The Guardian Politics Blog, available at <https://www.theguardian.com/politics/blog/2008/apr/14/boxingisthebestwaytostop> (accessed 29.4.17).
- Levermore, R. (2008) Sport: A new engine of development? *Progress in Development Studies*, 8, 183-190.
- Levermore, R. (2011) Evaluating sport-for-development: Approaches and critical issues. *Progress in Developmental Studies*, 11, 339-353.
- Lindsey, I., Kay, T., Jeanes, R. and Banda, D. (2017) Localizing global sport for development. Manchester, Manchester University Press.
- Matthews C.R. (2014) Biology ideology and pastiche hegemony. *Men and Masculinities* 17(3), 99-119.
- Matthews C.R. (2015) Being nose-y – The body as an effective but flawed tool for research. In: Wellard I (ed.) *Researching Embodied Sport – Exploring Movement Cultures*. London, Routledge.
- Matthews C.R. (2016) The tyranny of the male preserve. *Gender and Society* 30(2), 312-333.
- Matthews C.R. (2019) Becoming a “decent man” learning through boxing. In: Barker-Ruchti N (ed.) *Athlete Learning in Elite Sport: A Cultural Framework*. Abingdon: Routledge, 59-71.
- Matthews, C.R. (2020) 'The fog soon clears': Bodily negotiations, embodied understandings, competent body action and 'brain injuries' in boxing. *International Review for the Sociology of Sport*. 56(5), 719-738.
- Matthews, C.R. (2021). *Doing immersive research vol.1: using social science to understand the human world*. Beeston: CRM Publishing.
- Matthews C.R. and Channon A. (2016) 'It's only sport': The symbolic neutralisation of 'violence'. *Symbolic Interaction* 39(4): 557-576.
- Matthews, C.R. and Channon A. (2017) Understanding sports violence: revisiting foundational explorations. *Sport in Society* 20(7): 751-767.
- Matthews C.R. and Channon A. (2020) The 'male preserve' thesis, sporting culture, and men's power. In Gottzén L, Mellström U and Shefer T (eds) *Routledge Handbook of Masculinity Studies*. London: Routledge, 373-383.

Matthews, C.R. and Jordan, M. (2019) Drugs and supplements in amateur boxing: Pugilistic amateurism and ideologies of performance. *Qualitative Research in Sport Exercise and Health* 12(5), 631–646.

McCrory P, Zaryn T and Cameron P (2007) The evidence for chronic traumatic encephalopathy in boxing. *Sports Medicine* 37(6): 467–476.

Menesson, C. (2000) 'Hard' women and 'soft' women: The social construction of identities among female boxers. *International Review for the Sociology of Sport* 35(1), 21-33.

Mwaanga, O. and Adeosun, K. (2020) Reconceptualizing sport for development and peace (SDP): an ideological critique of Nelson 'Madiba' Mandela's engagement with sport, *Sport in Society*, 23:5, 847-863.

Nichols, G. (2007) *Sport and Crime Reduction: The Role of Sports in Tackling Youth Crime*. London, Routledge.

Nichols, S., Giles A. and Sethna, C. (2010) Perpetuating the 'lack of evidence' discourse in sport for development: Privileged voices, unheard stories and subjugated knowledge. *International Review for the Sociology of Sport*, 46, 249-264.

Parsons, T. (2013) Boxing should be taught in every school. *GQ Magazine*, available at <http://www.gq-magazine.co.uk/article/tony-parsons-boxing-mike-tyson-carl-froch> (accessed 20.4.17).

Paradis, E. (2012) Boxers, briefs or bras? Bodies, gender and change in the boxing gym. *Body and Society*, 8(2), 82-109.

Prus, R. (1996) *Symbolic Interaction and Ethnographic Research – Intersubjectivity and the Study of Human Lived Experience*. Albany, NY, State University of New York.

Smith, R., Danford, M., Darnell, S.C., Larrazabal, M.j.L. & Abdellatif, M. (2021) 'Like, what even is a podcast?' Approaching sport for-development youth participatory action research through digital methodologies. *Qualitative Research in Sport, Exercise and Health*, 13,1, 128-145.

Smith, A. and Waddington, I. (2004) Using "sport for community schemes" to tackle crime and drug use among young people: Some policy Issues and problems. *European Physical Education Review*, 10(3), 279-298.

Spaaij, R. (2011) Sport as a vehicle for social mobility and regulation of disadvantaged urban youth. *International Review for the Sociology of Sport*, 44(2), 247–264.

Spaaij, R., Schlenker, N., Jeanes, R. and Oxford, S. (2018) Participatory research in sport-for-development: Complexities, experiences and (missed) opportunities, *Sport Management Review*, 21,1, 25-37.

Sugden, J. (1996) *Boxing and Society – An International Analysis*. Manchester, Manchester University Press.

Svensson, P.G. and Levine, J. (2017) Rethinking Sport for Development and Peace: The Capability Approach. *Sport in Society*, 20:7, 905-923.

Taylor P. (1999) *External Benefits of Leisure: Measurement and Policy Implications*. London. Presentation to Tolern Seminar DCMS.

Theeboom, M., De Knop, P. and Vertonghen, J. (2009) Experiences of children in martial arts. *European Journal for Sport and Society*, 6(1), 19-35.

Tjønndal A, and Hovden J. (2021) 'Will God condemn me because I love boxing?' Narratives of young female immigrant Muslim boxers in Norway. *European Journal of Women's Studies*, 28(4):455-470.

van Ingen, C. (2011) Spatialities of Anger: Emotional Geographies in a Boxing Program for Survivors of Violence. *Sociology of Sport Journal*, 28, 171-188.

Wacquant, L. (2004) *Body and Soul: Notebooks of an Apprentice Boxer*, Oxford: Oxford University Press.

Wright, W. (2006) 'Keep it in the ring: Using boxing in social group work with high-risk and offender youth to reduce violence', *Social Work with Groups*, 29(2-3), 149-174

Woodward, K. (2006) *Boxing, Masculinity & Identity: The 'I' of the Tiger*. London, Routledge.

Woodward, K. (2014) Legacies of 2012: Putting women's boxing into discourse. *Contemporary Social Science. Journal of the Academy of Social Sciences*, 9(2), 242-52.

ⁱ In the UK context there is very little difference between amateur and professional boxing at the lower and middle levels of both forms of the sport. While such differences are apparent in other national settings and impact on the cultural framing of the sport, this was not something that was significant in relation to the findings presented here. However, see Matthews and Jordan (2019) for a discussion of how amateurism does still frame certain elements of boxing in the UK.

ⁱⁱ These discussions are usefully developed within debates around the 'capabilities approach' to sports development please see Darnell and Dao (2017) and Svensson and Levine (2017)