

Theorising painkiller (mis)use in football using Bourdieu's practice theory and physical capital

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Abstract

This conceptual article advances the value of Bourdieu's practice theory and physical capital as a tool to understand the various types of painkiller (mis)use in sport. Consuming painkillers to manage injury and fatigue is a common practice among male professional footballers and misuse can exacerbate existing injuries and contribute to chronic physical and mental health conditions. In order to highlight the interaction between micro and macro-level factors we conceptualise painkiller use in professional football as a relational process between habitus, capital, and field position wherein variation in use is a result of social trajectory and field experiences. The analysis elaborates upon Bourdieu's practice theory in sport. It shows that the importance of protecting physical capital stems from internalised dispositions about how the body is viewed, which legitimise the use of painkillers within the social field of football despite the damaging potential outcomes for players. The article extends Bourdieu's practice theory to managing painkiller (mis)use, provides recommendations towards a future research programme, and identifies potential interventions for improving athlete welfare.

Keywords

habitus, physical capital, NSAID, athlete welfare, presenteeism

Sports physicians and researchers have voiced concerns about the high distribution and use of painkilling (i.e. analgesic) drugs, and, in particular, non-steroidal anti-inflammatory drugs (NSAID) among professional footballers due to the potential harm posed by misuse (i.e. consumption that contravenes medical indication or need) (e.g.

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Tscholl et al., 2017). Painkiller use during sport can intensify exercise-induced physiological damage (e.g. van Wijck et al., 2012) and misusing analgesic substances is associated with severe renal, gastrointestinal, and cardiovascular conditions (Harirforoosh et al., 2013; Lundberg and Howatson, 2018; Tscholl et al., 2017). Further, using painkillers to mask persistent pain can lead to acute injuries becoming chronic, as well as long-term physical harm post-career (Fernandes et al., 2020). Prolonged use of painkillers may also lead to social and psychological harm as athletes can become addicted to substances during and after their career, while the stigma associated with addiction may negatively impact mental health (Mannes et al., 2020).

As per the 2022 World Anti-Doping Agency International Standard Prohibited List, only analgesic substances that contain specified narcotic (S7) or cannabinoid (S8) compounds are banned in football, whilst most other painkilling substances, such as NSAIDs (e.g. Ibuprofen), are permitted (World Anti-Doping Agency, 2022). Of particular concern for football is over the counter NSAID pills, such as Ibuprofen. NSAIDs are available from medical staff and commonly prescribed to footballers, which means that players exist in an environment where NSAIDs are readily available (Tscholl et al., 2017). NSAIDs legal status means players may also purchase and consume these privately (Cunningham, 2018; Mundie and Jurejko, 2017). Recent evidence indicates that painkiller misuse exists in professional, lower-league, junior, and women's football (Babwah, 2014; Correctiv, 2020; Trinks et al., 2021; Tscholl et al., 2015). To be clear, there are legitimate reasons for painkiller use and not all players taking painkillers are misusing them. Yet, data about the *number* of footballers using NSAIDs has led some researchers to suggest that, for some, the purpose is to mask injury, reduce perceived fatigue, and bolster psychological reassurance (Tscholl et al., 2017). These cautions correspond with concerns about increased painkiller use in other physically demanding contact sports and endurance events (Harle et al., 2018) against the backdrop of a global opioid use crisis (Ekhtiari et al., 2020).

Previous studies have identified that an athlete's decision to play through injury (i.e. presenteeism) is driven by a series of assumptions, including (1) the acceptance that injury and pain are typical experiences in elite sport (Theberge, 2008), (2) the normalisation of using painkillers in order to continue playing (Mayer and Thiel, 2018), (3) the desire to maintain loyalty to team-mates or coaches and not 'let them down' (Madrigal et al., 2015), and (4) the implicit threats to 'careers or sporting success' that accompany unwelcome absences from playing (Overbye, 2021: 22). Painkiller use is therefore a complex social phenomenon emerging from interrelated individual, organisational, and systemic factors meaning the same substance can 'materialise as different things' (King et al., 2014: 251) depending on the context in which it is used. Thus, managing painkiller use in sport presents a unique technical and ethical debate compared to other sport injury debates (e.g. concussion) because (1) substances can be quickly and legitimately acquired from sport physicians, (2) the ability of athletes to self-medicate privately, (3) the plethora of substances and methods available to players, and (4) the difficulty in demarcating what exactly constitutes misuse as not all painkiller consumption is dangerous or deviant (Bennett, 2013; King et al., 2014). In consequence, the problem requires a nuanced analysis using theories capable of developing multi-layered explanations.

Proposed by sociologist Pierre Bourdieu (1984, 1990, 1992), practice theory explores the relationship between an individual's micro-level 'social trajectory' and macro-level social structures in order to provide a critical, multi-layered analysis of how behaviour emerges from internalised beliefs and social dynamics (Kitchin and Howe, 2013). Practice theory relies on three master concepts to explain how social position and behaviour are connected over time and experience: the field (i.e. social hierarchies), habitus (i.e. behavioural dispositions), and capital (i.e. resources available to an individual). Practice theory has been employed to understand painkiller use in other contexts outside of sport, such as the opioid crisis in the US where, for example, Sered (2019) argued that 'multi-generational structural and cultural patterns' (p. 48) created a decline in social support available to individuals contributing to the epidemic. Therefore, reasons for painkiller use should be treated as a result of both an individual's internalised dispositions accrued through experience, as well as present social conditions (Bourdieu, 2000).

Physical capital (i.e. the social formation of embodied athletic, technical, and aesthetic assets; Bourdieu, 1986) has emerged as a promising theoretical instrument within practice theory to understand how athletic behaviours are related to physical capabilities, personal history, and social factors (McGillivray et al., 2005; Moret and Ohl, 2019; Ungruhe and Agergaard, 2021). Pertinent to the present study, Aubel and Ohl (2014) studied performance enhancement in professional cycling using Bourdieu's concepts to conceptualise doping as a normalised cultural practice learned through interaction with their social environment including employment precarity. Physical capital and practice theory has not yet been applied to better understand painkiller use as a cultural practice. Using Bourdieu's concept of capital, we argue that athletes sacrificing physical capital during a sporting career is more than a rational decision, it is a result of historic experiences (e.g. prioritising sport over education) and current social processes (e.g. employment precarity and masculine cultures of pain) that form internalised dispositions to treat the body as an instrumental tool, which unconsciously legitimates painkiller use as an acceptable practice. Using men's professional football as a specific field for relational analysis, this conceptual article applies practice theory and physical capital to professional football to provide a demonstrative conceptual example of the complexities of painkiller use. In doing so, we advance relational methodologies using practice theory and physical capital as important theoretical tools to research and manage painkiller use. Further, based on existing literature we conceptualise painkiller use in professional football as a multi-layered issue ranging from non-use to misuse, provide a research programme for future studies of painkiller use, and outline strategies to manage painkiller misuse informed by practice theory.

The following section details the master concepts within Bourdieu's practice theory venturing deeply into physical capital and its relationship to sport, followed by a conceptual analysis of painkiller use in football, before concluding with practice theory informed recommendations for managing painkiller use.

Theoretical framework

Practice theory

With the aim of better explaining the relationship between social structures and individual behaviours, Bourdieu (1984, 1990, 1992) conceived practice theory consisting of three concepts: the habitus, the field, and capital. Bourdieu's theoretical apparatus are understood as a 'flexible and open analytic framework' (Wacquant, 2014:124) designed to direct investigation rather than simply theoretically label social phenomenon. Bourdieu (1984) argued that individuals cognitively internalise their social world whilst simultaneously existing within it, meaning behaviour is a result of both social history and social conditions rejecting theories that pit agency against structure.

Here we have adopted Bourdieu's perspective in preference to other major sociological theories applied in sports sociology, such as those offered by Marx and Foucault, because of the importance Bourdieu gives to an individual's developmental trajectory, characteristics, and current social environment in refining personal tastes and dispositions (Bourdieu, 1984, 2000). By incorporating micro-level experiences and macro-level structures, practice theory provides space to explain how similarity and variation in behaviours reflect a complex intersection of collective and individual history (e.g. familial social class) as well as broader social stratification. Bourdieu's theoretical apparatus enables a multi-layered analysis of painkiller use. It provides a powerful framework to unpack the interaction between personal histories and social fields, and to examine previously identified mechanisms, such as normalisation of pain, playing through injury, team loyalty, and career vulnerability (Madrigal et al., 2015; Mayer and Thiel, 2018; Overbye, 2021). Further, Bourdieu (1984) specifically focussed on differentiating the sports ecosystem from other culture industries (Zevenbergen, et al., 2002). As Bourdieu (1984) argued, 'the history of sport is a relatively autonomous history which, even when marked by the major events of economic and social history, has its own evolutionary laws, its own crisis, in short, its specific methodology' (p. 341). Moreover, according to Bourdieu, the cycle of social life was like competing in a sporting contest where every social agent, actor or entity occupies a place on a field of play. However, instead of aiming to 'score goals', social agents aim to secure as much territory as possible, where the territory is measured in scales of power, influence, and social position. In this game the successful players are those who accumulate the most stocks of capital.

The first of Bourdieu's master concepts, habitus, is recognised as the unifying concept between social structures and personal agency as individuals are conditioned by collective (e.g. social class) and individual histories (e.g. childhood experiences) to form dispositions that are internalised into the body to guide behaviour (Bourdieu, 1990). However, behaviour is constrained to the unwritten, but accepted rules of a field influencing what an individual perceives as conceivable and acceptable within a social context (i.e. legitimate) known as *doxa* (Bourdieu, 1984). Therefore, an individual's habitus is unique, but may be broadly categorised in a certain class of habitus connected by similar experiences (Bourdieu, 1990). Habitus, although being durable and predominantly determined by developmental experiences, are still dynamic and open to incremental change when an individual is exposed and responds to a repeated social situation unconsciously

modifying existing dispositions of practice (Bourdieu, 2000). In professional cycling, for example, riders socialised in an amateur environment perceived as uncondusive to doping were subject to secondary socialisation in professional teams that had the potential to modify dispositions towards favourable views on doping (Aubel and Ohl, 2014). Therefore, habitus connects collective and individual histories with present environments through accumulative change (Bourdieu, 2000).

The next concept is capital, of which, there are three species that agents can accumulate, transfer, or lose (Bourdieu, 1986). First, economic capital encompasses material wealth and possessions. Second, cultural capital captures an individual's social knowledge and tastes obtained from education and membership of a social class which facilitates social mobility. Cultural capital exists in three forms: (i) *embodied* through the physical manifestations of culture such as learned knowledge and skills (ii) *objectified* through ownership of cultural artefacts, and (iii) *institutionalised* recognition of cultural knowledge granted by organisations (Bourdieu, 1986). Last social capital refers to the potential resources available to an individual from their network of relationships. The term symbolic capital refers to non-material resources and the extent to which economic, cultural, and social capital are recognised as legitimate in a particular field (Bourdieu, 1989).

If habitus are the learned dispositions, the field is the configuration of hegemonic relationships between objective social positions defined by capital, and opportunities afforded to individuals (Bourdieu and Wacquant, 1992). Individuals in a field compete for field position and capital. For example, economic capital (i.e. wealth) can be used to develop social capital by paying to join a golf club that provides new business contacts (Bourdieu, 1986). In sum, field structures establish the value of different forms of capital to a specific industry or environment (Anheier et al., 1995).

Practice theory, physical capital and painkiller misuse

First mentioned in *Sport and Social Class* (Bourdieu, 1978) to explain how the function of sport and the body differs between social classes (i.e. the lower classes tend to view their body as instrumental tool for work), physical capital is a subtype of embodied cultural capital in sport and health contexts (Fulton, 2011; McGillivray, Fearn and McIntosh, 2005; Ungruhe and Agergaard, 2021). Shilling (1992) stated 'The production of physical capital refers to the social formation of bodies by individuals through sporting, leisure and other activities in ways which express a social location and which are accorded symbolic value' (p. 3). Physical capital encompasses the athletic, technical, and aesthetic sporting capabilities that can be exchanged for other forms of capital (Bourdieu, 1986) and is often used interchangeably with 'bodily capital' (see Wacquant, 1995), depending on whether it is defined as a unique type of capital or subsumed within cultural capital.

The exchange value of physical capital is determined by field positions and structures. For example, the working class have been traditionally reliant on their body for work, and the undervaluation of physical capital as a form of embodied cultural capital relative to economic capital has contributed to societal inequalities (Shilling, 1991). In this sense, those who control the most highly valued forms of capital in a field are in a position

of power and determine behavioural expectations or, as Bourdieu (1986) states, ‘the unequal distribution of capital, is the source of the specific effects of capital’ (p. 84).

A review of the literature emphasises that there is limited research that has previously utilised Bourdieu’s master concepts to specifically explore athlete welfare issues. Cushion and Jones (2006) highlighted how football coaches can draw power from their position as leaders to legitimate verbal abuse towards players (i.e. it is the way things are done). Further, players who accept verbal abuse as normal benefit by accruing cultural capital attributed to being viewed as a good (unproblematic) player. Similarly, Zehntner (2020) articulated how athletes legitimate and normalise unequal capital relationships by misrecognising emotional abuse as a necessary practice for sporting success. The valorisation of playing hurt may even enable a player to accrue symbolic capital (Roderick, 2006). However, physical capital is yet to be utilised as a theoretical tool to understand painkiller (mis)use.

We argue that practice theory, and physical capital in particular, offer an opportunity to better understand micro and macro-level issues underpinning variations in painkiller use within a sporting population. The advancement of physical capital and its utility to scaffold a superior interrogation of painkiller use is advantageous for multiple reasons. First, physical capital provides a cultural capital-based explanation for internalised habitus (dispositions) towards physical practices in relation to the pursuit of economic and social rewards. By analysing how an individual treats their body, we can inspect their implicit habitus and dispositions (Bourdieu, 1984; Shilling, 1991). Second, it gives space to bodies as something that can be worked on to claim a distinctive, symbolic position within a social hierarchy that also might confer economic privileges and social connections when other economic, cultural, or social options for social mobility are limited. Third, it contrasts material capital versus non-material capital (e.g. reputation, taste, cultural superiority) as legitimate resources (Bourdieu, 1986). Fourth, physical capital provides a conceptual platform from which to build an analysis of the ways in which athletes go about their body work, including their preparedness to trade non-material for material capital to accumulate power, even at the expense of their health. Finally, Bourdieu’s theoretical framework considers the role of an athlete’s individual history, collective history, and current context in understanding body work (Bourdieu, 2000; Bourdieu and Wacquant, 1992). As a result, athletes can acquire greater capital when they sacrifice one form they possess, such as their bodies, for another form they do not possess, such as economic wealth. Based on Bourdieu’s practice theory, we propose that a player’s willingness to sacrifice physical capital, through painkiller (mis)use is the result of their experiences gained through their social trajectory, current field position, and field-level capital imbalances, and to independently focus on social structures or personal attitudes diminishes the relationship between the two.

Drawing from previous academic literature and interview data contained in published media sources collected from a search of the repository Nexis, the following section provides a conceptual discussion of painkiller use in football as a multi-layered phenomenon. Using Bourdieu’s relational perspective and the concepts of habitus, the field and capital, with a particular focus on physical capital, the discussion provides an example of the nuances of painkiller use. Appreciating that habitus are relatively durable, but still flexible to modification in response to repeated experiences

(Bourdieu, 2000), we demonstrate how social trajectories and repeated field-level situations may modify a player's dispositions more favourably towards painkiller (mis)use similar to the process of secondary socialisation noted by Aubel and Ohl (2014). Given the limitations of relying upon prior literature and interviews gleaned from newspaper articles, the discussion is not intended as an empirical analysis, but rather a detailed conceptual example demonstrating the value of treating painkiller use as a cultural practice.

Physical capital and painkiller use in football

Evidence of painkiller use in football

Data provided by team physicians declaring therapeutic substances taken by players in doping control forms provide an excellent opportunity to study painkiller usage rates (Tscholl et al., 2015). Evidence that the professional football environment is conducive to painkiller use is demonstrated by World Cup data. For example, at the 2010 men's World Cup, 39% of players took some form of painkiller before every game (Tscholl and Dvorak, 2012). At the 2018 men's World Cup, 40% of players used NSAIDs at some point during the tournament while 17% used other forms of analgesics (Oester et al., 2019). At a national elite level, data from the German Bundesliga found that 32% of in-competition doping control forms declared the use of some form of analgesic with the NSAID, ibuprofen, being the most frequently reported (Trinks et al., 2021). Evidently, NSAIDs are commonly used and readily available to players from team medical staff and carry significant side effects if misused.

The evidence of pharmaceutical prescriptions across football demonstrates how painkiller use prior to playing is relatively commonplace in football. Interviews with players add further anecdotal support. For example, retired footballer Kris Commons referred to his daily intake of painkillers to manage an injury as 'just part and parcel of football' (Grieve, 2013). Similarly, Goalkeeper, Tommy Lee, indicated that painkiller consumption is normalised in the field to the extent that potential risks are not considered: '[I] never thought at all, until recently, that this could be bad for my health' (Robertson, 2017a). Lee only changed his view towards the risk of painkiller use following a statement from another professional footballer, Daniel Agger, about the health consequences and long-term physical capital loss he had suffered as result of extended painkiller misuse (Robertson, 2017a). That both Commons and Lee ['I never thought at all'] took painkiller use for granted is indicative of an unconscious disposition that normalises use.

Player interview and doping control form data support indicate that painkiller use in football is frequent but leaves questions about the nature of this practice given that even the high injury rates seen in football (Noya Salces et al., 2014; Ristolainen et al., 2010) do not seem to warrant the elevated levels of painkiller prescription (Tscholl et al., 2015). In comparison to the clear demonstration of high usage rates, there is less direct evidence of misuse (i.e. not following the specified dosage or treatment period) through players' personal consumption or team medical staff practices. Recently, a group of journalists interviewed over 150 players, coaches, and experts, highlighting that painkiller misuse to prevent and compensate for fatigue, recovery, or injury is

commonplace in professional German football (Correctiv, 2020). This is corroborated by multiple accounts from current and former professional footballers, coaches, and doctors who have suggested a high prevalence of painkiller use to allow players to continue through physical limitations (e.g. Bengel, 2017; Cunningham, 2018; Mundie and Jurejko, 2017; Wilson, 2018).

Player accounts of typical usage vary and demonstrate the difficulty in differentiating legitimate use from misuse due to the type of substances available, patterns of use, and reasons for consumption. For example, following a hip injury, one anonymous international player described taking ‘two anti-inflammatories and two co-codamol [paracetamol and codeine] tablets the night before a game and then in the morning two more anti-inflams and two paracetamol’ for an undisclosed extended period (Robertson, 2017b). More alarmingly, one unnamed English Football League player privately took ‘three diclofenac [NSAID] pills a day for three years so that he could play after an operation’ which was later self-moderated to ‘five or six a week - taken largely in the build-up to a game’ (Robertson, 2017b). Tommy Lee recounts his routine of: ‘one tablet in the morning, so I could train, then one after training so it wasn’t too bad sat on the sofa, or going to the shops, or sleeping at night’ (Robertson, 2017a). Former Liverpool defender, Dejan Lovren indicated that he took five painkillers before a game to manage injuries (Observer Sport, 2017). The level of painkiller use expressed by players and in doping control forms suggests that some players have, to varying extents, internalised a disposition that privileges their physical capital during their career regardless of health risk, yet engage in levels of (mis)use significant enough to lead to short and long-term harm (Harirforoosh et al., 2013; van Wijck et al., 2012). Like all clandestine behaviours, it is difficult to accurately measure the extent of the problem, however, the available evidence suggests that painkiller use is diverse, and misuse is prevalent enough to warrant attention.

Physical capital and employment uncertainty

Previous research with professional footballers has evidenced the precarious employment conditions footballers find themselves within, especially once outside the top tier division (Adams and Darby, 2020; Roderick and Schumaker, 2017). Employment precarity can be viewed as a field-level capital imbalance, as the relative scarcity and value of contracts that clubs control contrasts the global competition for positions. Uncertainty demands that athletes must take full advantage of every opportunity to showcase their physical capital (i.e. ability) to attract further employment or risk redundancy (Roderick, 2006). Employment precarity as a driver of painkiller (mis)use is borne out in evidence from players. The experience of retired footballer Tom Craddock exemplifies the need to demonstrate physical capital: ‘I had trained all week and my knee was like a balloon. I look back and think “What on earth was I doing?” I was so desperate to get out there and prove myself, filling up with anti-inflammatory tablets to get through it’ (Allen, 2021). Craddock’s reflection on his behaviour again highlights an unconscious disposition that painkiller use to play through injury was legitimate at the time, and it is only in retrospect that he questioned the appropriateness of his own behaviour. Similarly, the prioritisation of short-term gain is evident in retired footballer Tommy Lee’s comments:

'You're not bothered what's going to happen in ten years. You're bothered about the Saturday after; you're bothered about your next contract; you're bothered about your bonuses, paying your mortgage, doing well and achieving things' (Robertson, 2017a). As Gregor Robertson, also a retired footballer, explained:

The pressures on players are relative: for me my livelihood was at stake, as was Football League survival. For a Premier League player, with four years remaining on his contract, the driver may be to keep his place in the team, or perhaps to be part of winning a title. When a few pills can make that happen, despite the risks, it's an easy decision to make. (Robertson, 2017b)

The recognition that it is an 'easy decision to make' evidence how footballers, whether internalised or not, are socialised in an environment where painkiller use becomes a common practice. Robertson's (2017b) comments also signal that the stimuli for painkiller use are not homogenous, and that within the category of footballers, there are athletes with varying degrees of employment vulnerability evidencing the need to study the impact of prior and current social situations in future research.

Football places high physical stress on athletes via training and match-play conducive to injury and therefore increases the propensity for painkiller (mis)use. Footballers are more likely than other athletes to experience an injury (Ristolainen et al., 2010), and data from Spanish football suggest that roughly 1 in 3 of these injuries leads to more than 8 days convalescence (Noya Salces et al., 2014). In terms of total time lost, teams without a winter break suffer 1300 player non-attendance days due to injury, while teams with winter breaks suffer 888 player non-attendance days (Ekstrand et al., 2019). Ekstrand et al.'s evidence indicate that extended fatigue may increase the chance of injury. Likewise, the risk of injury is increased by congested fixture schedules caused by concurrent competitions (e.g. domestic league competition, domestic cup competition, continental cup competition) (Bengtsson et al., 2013). The effect of high injury rates, increasing physical demands, and fixture congestion correlate with on-field performance. Teams that have a lower incidence of injury and greater player availability are associated with improved performance (Hägglund et al., 2013). Given the economic performance incentives present in football (e.g. greater broadcasting and sponsorship income), injury statistics portray a working environment for footballers characterised by repeated exposure to a high likelihood of injury, increasing physical stress, and pressure to maintain physical readiness.

In addition, team owners have economic capital to implement development pathways, professional academies, and global scouting systems. These operations foster a renewal of physical capital (i.e. players) providing competition for existing athletes. Accordingly, the field of football is structured so that there is a constant supply of physical capital to replace injured players, or footballers who have not yet had the opportunity to demonstrate their bodily talent. As one former Premier League footballer exemplified: 'I struggled with injury for the majority of my career... I needed a jab, to see a chiropractor, take something, always something. If you don't put yourself on that park someone else will' (Cunningham, 2018). The constant threat of replacement ensures that painkiller (mis)use to play through injury becomes a legitimate mechanism to protect future employment opportunities, based on a worldview of insecurity. Equally, the economic

worth attached to a small cadre of elite players, that may be devalued via injury, may serve as a protection mechanism as clubs look to protect financial assets. Again, experiences and differences in physical capital between footballers become important in understanding unconscious dispositions towards painkiller use, how an athlete treats their body, and privilege in the field of football.

Employment precarity becomes more problematic when acknowledging that in pursuit of a football career the necessary dedication and prioritisation required to achieve a level of physical capital that is sufficient to translating into economic capital (i.e. being good enough to play professionally), typically impedes the development of other forms of cultural capital valued in fields outside of football, such as formal educational qualifications (Adams and Darby, 2020; Agergaard and Sørensen, 2009; McGillivray et al., 2005; Stronach and Adair, 2010). As a result, a typical footballer's social trajectory through an academy system often creates a disposition that the body is required for success in life rather than formal education, and those on lower salaries face pressure to maximise the finite potential of their careers to provide financial stability as employment options after sport are often limited.

The behaviour of playing through injury using painkillers also appears to be normalised as a legitimate practice by some players early in their career. Former Middlesbrough footballer, Alan Moore explained how his use of painkillers began at 20:

From the age of 20-21 my breakfast was a few brufs [Ibuprofen; NSAID] and a can of Red Bull. Or a few Difene [NSAID] or Voltarol [NSAID] or whatever the in vogue anti-inflammatory was. I still have to take brufen for breakfast. At the age of 26, I couldn't get out of bed - it took me five, ten minutes just to be able to walk, once the drugs kicked in. But I wasn't just going to give up. (Walford, 2019)

Not only do Moore's comments indicate that he learned the practice early in his career, but his final sentence suggests a need to make the most of the opportunity he was presented with. Without specific interview data on family and personal history, it is difficult to develop in-depth statements on social trajectories. However, prior studies and the comments presented here indicate how young footballers are socialised through training academies and as a result of the idiosyncratic contextual pressures of their own personal histories, such as early-career injury.

The outcome of precarious employment and a lack of access to alternative vocational paths is a heightened dependence on maximising physical capital (McGillivray and McIntosh, 2006). As retired Premier League footballer Michael Dawson articulated: 'Anti-inflams [NSAIDs] are part of football, and always will be, because you need to be able to play as many games as possible' (Robertson, 2017b), implying that, for some, a disposition is formed in professional football where performance is valued above health demonstrated in painkiller consumption patterns.

Pain culture

Previous studies have shown that footballers compete under working conditions that valorise playing through pain and injury (Roderick et al., 2000, 2006). Athlete accounts

suggest that normalisation of playing through pain emerges from factors such as not wanting to let team-mates down, a strong athletic identity, and acceptance that injury is part of the profession (Madrigal et al., 2015; Roderick et al., 2000). Pressure to play through injury is exacerbated in football teams with less economic capital to replace players (Hammond et al., 2014). A situation emerges where professional footballers are conditioned by their working environment to form the disposition that competing through pain and injury is normal and part of the job, and to do so is legitimate. The consequence is a culture that ostracises athletes as weak or uncommitted who do not play through injury, whereas those athletes who are willing to ‘sacrifice’ themselves are held in high regard (Cunningham, 2018), and consequently accumulate social capital. This dynamic may be more salient for players who possess less physical talent and might be more easily replaced, or have developed through football academies where exposure to competitive pressure leads to the formation of a ‘stay in the game’ disposition.

Testimonies from professional footballers exemplify that a professional football career is defined by a culture that normalises pain and expects that players to sacrifice physical capital for the team. As professional footballer, Tammy Abraham articulated about playing through injury on painkillers: ‘My ankle is still painful but sometimes as players, you have to play through pain. For me, it just about getting out there and helping the team’ (Tribuna, 2020). Likewise, former Premier League footballer Danny Mills asserted, ‘I’ve been in many dressing rooms where I’ve seen other players pressured into playing with painkillers’ (Mundie and Jurejko, 2017). A quote from Scottish Premiership player, Alim Ozturk is particularly enlightening into the habitus of players:

I’d been struggling with this [abdominal injury] since February but last season I wanted to keep playing to help the team win the league and I played a lot with painkillers and injections... I knew myself I have to stop playing now’ but I wanted to keep playing for the team. I felt like I had to do it for the team but in hindsight it was stupid because it ended up killing my whole body. (Brown, 2015)

Those players who do not follow the expected behaviours may then risk their careers by being seen as a liability. Further, Ozturk’s reflection and recognition of the associated risk after the decision had been made emphasises the unconscious dispositions that normalise such behaviours as legitimate. Former English Premier League footballer Jason Roberts commented on how players who are unwilling to play through pain are perceived:

Often it’s couched in a lack of commitment. And also, not just players: by fans, managers, the whole environment sees you as a weak character, if the perception is you can’t play through pain. You don’t show weakness to anyone, ever. That’s the rule. So if you can play through it you do. (Cunningham, 2018)

The value of the Bourdieu approach is that it helps to expose how internalised dispositions that subconsciously guide and legitimate behaviours emerge. For players who are repeatedly exposed to a culture of sacrifice and may have also grown up within a

youth football environment with similar views, habitus may be formed and reformed to internalise the view of painkiller use as an acceptable practice.

The pressure to play cannot be separated from inequitable field relationships with coaches who occupy a position of authority derived from team selection (Cushion and Jones, 2006). One anonymous professional English player mentioned the pressure stemming from coaches: ‘The manager will only be there short-term. They need results. Are they worried about your health and wellbeing? No. They want three points, they want results. It’s cutthroat’ (Cunningham, 2018). There are other instances of coaches expecting players to compete through injury. Former Chelsea captain John Terry explained how he was asked by his coach Jose Mourinho to take painkilling injections whilst suffering from a broken toe and foot:

I had to have two injections in my toe every day for a whole year, one before training and sometimes the doctor would have to come out and re-inject me because it wore off in training if it was a longer session than an hour.... It was just a given for me. I would do it again tomorrow because it sounds crazy but you would give your life for the football club when they have given you so much over the years. (Benge, 2017)

Terry’s comments and in particular, ‘it sounds crazy’, reinforce the internalised habitus that normalises the sacrifice expected of players, as well as the variety of painkilling options available. In a gross example of what can happen when players are compelled to play through injury, former Nottingham Forest footballer, Matty Fryatt took his former employer to court for negligence related to the treatment of an Achilles injury, before privately settling the dispute with no admission of liability from the club (Gill, 2021). Fryatt explained that he was ‘pressured to play because the other forwards at the club were suspended or injured and they didn’t have another viable option’ (Gill, 2021). Although Fryatt received financial compensation, the case demonstrated how it is the players who suffer the lasting consequences of the internalised disposition to play through injury.

Long-term physical capital diminishment

The long-term outcomes of painkiller (mis)use are evident in retired footballers. For example, intra-articular knee injections of local anaesthetic to treat injury during a player’s career correlates with self-reported knee pain and the likelihood of total knee replacement post-career (Fernandes et al., 2020), even when accounting for the presence of a knee injury indicating that pain relieving injections are detrimental to knee health. Further, those who had injections used more painkilling drugs in retirement, a finding consistent with qualitative research demonstrating that pain medication use was common among retired professional footballers diagnosed with osteoarthritis (Turner et al., 2002). Comments from retired footballers have indicated that painkiller use to mask injury has left some individuals struggling to walk (Wilson, 2018).

Although not argued here to be common, there are some extreme illustrations of the long-term impact of painkiller misuse. Former Liverpool defender, Daniel Agger expressed that he now lives with back pain after long-term painkiller misuse to continue playing following a prolapsed disk (Christenson and Henriksen, 2016). Retired Scottish

international, Dominic Matteo, required multiple spinal surgeries after retiring and has limited mobility following a career of injections to mask injury (Mundie and Jurejko, 2017), while former Croatian international, Ivan Klasnic, was awarded £3.6 million in damages by his former club Werder Bremen on the argument that consumption of painkillers during his time at the club contributed to his kidney failure (Stonehouse, 2020). Evidently, a professional football career accelerates decline in lifetime physical capital stocks and the capital relationships underpinning painkiller use in football can pose long-term challenges to welfare.

Discussion

We have applied Bourdieu's practice theory to theorise how the social conditions of professional footballers may generate dispositions that legitimate painkiller use as an unquestioned, social practice. In the context of this paper, depleting physical capital through painkiller use despite the damaging potential outcomes is internally legitimated in a player's habitus by social history and repeated exposure to a range of experiences that normalise treating the body as an instrumental tool (Bourdieu, 1978).

This Bourdieu-based model of physical capital as the conceptual frame for this inter-rogation of painkiller use yields several important dividends. First, it highlights the fact that footballers are driven to engage in dangerous health practices because it delivers social and economic rewards. Second, it gives appropriate space to the body as something that can be manipulated to accumulate capital and acquire greater power within a habitus. Third, it demonstrates that the body can be positioned to claim a distinctive position in the social hierarchy. Fourth, it illuminates the ways in which the body can be used to build social relations and strengthen a class position, even if the effects on the body are harmful, thus trading off one form of capital for another. Fifth, it exposes the unsustainability of footballer's tactics to reinforce their stocks of bodily capital as viewed by other powerful social agents, by paradoxically diminishing those very stocks in the longer term. Finally, the Bourdieu-inspired conceptual model shows that painkiller (mis)use in football is not just a football problem, but one firmly connected to overarching, macro social forces, as well as underpinning micro personal needs. We now provide an agenda for future research and implications for managing athlete welfare that demonstrates how using Bourdieu's practice theory can facilitate deeper research and analysis of painkiller use in sport.

As a welfare issue, painkiller use presents unique challenges in the diversity of methods and substances athletes can apply, their ready availability from team physicians and public pharmacists, the legal status of most substances, and the challenge in establishing where appropriate use ends, and misuse begins. Consequently, practice theory (Bourdieu, 1984) provides new potential hypotheses and research directions for painkiller use in football, and in other sports such as American football and road cycling, that can accommodate the complex reasons underpinning practice.

First, there is the opportunity to understand variation in use and dispositions among footballers, and other athletes, based on social trajectories. The internalised view of the body as an instrumental tool for work, often caused by lack of perceived occupational opportunities in formative years (Bourdieu, 1978), may preside as a vulnerability

factor for misuse. Likewise, family attitudes and expectations towards sport as an occupation, and other forms of substance use may influence attitudes. Studies of athlete social trajectories and present attitudes to painkiller use may then help explain where attitudes emerge. Most elite athletes are socialised in their formative years through elite junior training programmes and academies, so uncovering how dispositions are influenced by exposure to painkiller use in junior settings presents another research opportunity. Given the tendency for coaches to come from a playing background, there is also a potential generational transfer of attitudes that contributes to formed dispositions. The degree of internalisation amongst athletes should also be examined; for example, a study of ex-footballers could determine the extent to which attitudes towards the body as an instrumental tool remain and the degree of pressure players may experience to conform. The comments of multiple footballers indicated how their decision to use painkiller use was underpinned by a normalised, legitimate view of the practice, however, it is likely that not all players share this view.

More broadly, studies that ascertain what athletes themselves consider to be use and misuse, and the beliefs and experiences upon which these are based, can help to explain the complex habitus that athletes inhabit. These views may also help unpack the materialisation of painkiller (mis)use as different things (King et al., 2014). Gendered dispositions towards pain also presents a significant opportunity to understand the specific needs of athlete welfare support, and the views of team doctors and medical staff are worthy of consideration when considering if pain is treated differently. The influence of other fields could also be explored. For example, how have changes in attitudes and policy towards cannabis-based products, such as CBD oil, generated new social structures and influenced views on pain management in sport. Equally, policy changes in other sporting contexts may have ramifications for football, as sports such as cycling and American football grapple with tramadol and opioids, respectively. Similarly, research should consider the protective effects of other forms of capital that may transfer into football, such as high social capital with individuals outside of sport. Ultimately, a practice theory informed research agenda for painkiller use does not seek to identify attitudes or social pressures alone, but instead focuses on the interaction between past and present experience as well as different levels of social field to create in-depth explanations.

Implications for managing athlete painkiller use

Firstly, increased employment security for footballers should be promoted. The analysis and previous literature show that outside of the highest echelons of football, professional football players may not earn enough to retire for life (Roderick, 2006; Roderick and Schumaker, 2017), and sacrifice educational development in the pursuit of a sporting career (Adams and Darby, 2020; McGillivray et al., 2005). Policies that ensure athletes are prepared for life after retirement from competition can help reduce the threat created by unemployment. Secondly, it is more difficult to reduce the pressure on managers who may embolden or ignore painkiller misuse. Team physicians simultaneously operate under the pressure to fulfil their duty of care to athletes whilst their continued employment partially depends upon the success of the sporting organisation and their social

standing within the club. Therefore, strategies that give medical practitioners greater agency without jeopardising necessary social connections may help combat managerial indifference (Malcolm, 2009; Waddington and Roderick, 2002).

Thirdly, at a governance level, reducing the intensity of playing schedules can improve recovery periods and reduce the risk of injury (Ekstrand et al., 2019). Reducing playing schedules is unlikely due to the associated commercial revenue that would be lost. Future research could explore alternative solutions and their impact on painkiller use, such as in-season breaks for all team or greater coordination between domestic, continental, and international competitions. Fourthly, duty of care initiatives that ensure players are provided physical, mental, and social support at the end of their careers (Gouttebauge et al., 2018) can create a degree of accountability between player and club.

Lastly, the challenges with painkillers might further encourage the consideration of alternative models for managing substance use in sport more generally (Smith and Stewart, 2015), some of which threaten the power elite's policy-making monopoly (Reed, 2012). One strategy is harm reduction, which suggests the problem has less to do with immorality and cheating and more to do with a threat to players' health and welfare (Kayser and Tolleneer, 2017). Rather than a punitive policy approach of investigation and coercive enforcement, that has seemingly failed to deter misuse and imposes significant infringements on athlete's rights (Skinner et al., 2016), harm reduction places athlete welfare as the priority. Accordingly, harm reduction strategies, such as promoting safer use of substances and offering informational resources, aim to protect the user without the precondition of abstinence. Ironically, by removing abstinence as the primary objective, harm reduction strategies typically outperform moral-prohibition policies in welfare and use outcomes (Klein, 2020). Sport holds winning as sovereign, and its socially sanctioned emphasis on achievement encourages painkiller usage. Harm reduction advocates argue that a punitive approach to substance use is ill-adapted to the dominant values of competitive sport, which is characterised by a culture emphasising heroism and risk taking. Sport may not promote a healthy lifestyle or moral development as is commonly thought.

Proponents of harm reduction approaches include substance use professionals, clinical experts, and drugs-in-sport researchers whose arguments centre on counselling and treatment, however, their capital stocks—especially economic—are constrained, and thus their policy influence remains minimal despite a strong evidence base (Kayser and Smith, 2008). Harm reduction is not about obstructive policing, incessant testing, onerous investigation, and severe sanctioning. Instead, it focuses on building structures and systems that deliver a number of harm reduction outcomes including (Stewart and Smith, 2014): (1) the creation of a playing environment where safety and effective harm management are strategic priorities, (2) a drug supply and distribution system that is regulated through the direct involvement of physicians and pharmacists, (3) the design of promotional campaigns that educate players about the risks associated with various substance, (4) the early intervention of medical support where damage to oneself or to others has occurred through some form of drug use, (5) the availability of broad-based drug rehabilitation and counselling services that allow players to remediate their high risk behaviours, and (6) a transparent listing or register of the drugs used by all

sporting bodies and players. In this context, painkiller regulation becomes useful only in so far as it lessens the potential harm to participants.

Despite the enormous number of studies done on drug use in sport, there is a lack of research that might explain how marginalised stakeholders like footballers may be given more space within the regulatory arena. For marginalised actors, the obvious challenge to the policy changes suggested is the potential threat they pose to the economic capital of dominant field-members including governing bodies, clubs, and sponsors. Collective representation and bargaining, the process of athlete groups negotiating with competition regulators, may be a viable avenue for athletes to shift the unfavourable capital relations currently typical of sports (Schwab, 2018). Furthermore, efforts to educate athletes on the risk of painkiller misuse should remain a central focus to address dispositions.

Conclusion

Many studies have reinforced the utility that Bourdieu's capital provides as a platform from which to build a social analysis. However, few have ventured deeply into the machinations of physical versions of capital, especially where its accumulation demands a commensurate and paradoxical relinquishment of physical health. We have shown that Bourdieu's conceptual framework sheds light on the dialectical mechanisms that lead footballers to sacrifice long term physical capital for short term supply. We note that the argument presented in this article requires future dedicated empirical studies for exploration and development in different contexts, however, the use of previous research and player interviews provide a strong initial, conceptual grounding. Although seemingly an unfavourable trade, a full appreciation of the footballer's habitus shows their behaviour to be perfectly legitimate as their long-term bodily capital is estimated as valueless in circumstances where the absence of immediate bodily capital will risk the wholesale discontinuation of their principal mode of capital accumulation – their footballing career.

In the language of Bourdieu, social advancement in a field requires navigating both capital relationships and dominant habitus in relation to the social field being occupied. As a result, a footballer's habitus shapes the way they view their world, their perceived place in it, and both their personal and social identity. In addition, and of central importance to this work, it also frames the dispositions they subconsciously apply to their bodies as instruments of power, and as a currency of capital. Further, football players use their bodies as catalysts for social action by enabling them to confidently enter various fields, secure capital, and enhance their future capacity for action and capital accumulation. Conversely, since a habitus can constrain action, containing the boundaries that inhibit or exclude certain behaviours, Bourdieu's physical capital as applied to painkiller use helps to expose at least part of the tacit and concealed habitus that football players inhabit.

A habitus enables social agents to engage in a social field, and exploit that space to accumulate capital, and the additional power and influence that goes with it. Furthermore, there is never any certainty that the habitus that was successful in accumulating capital, building power, and engendering influence in one social field, will do the same in another. A habitus is therefore not just a repository of all sorts of beliefs, attitudes, lifestyles, and ways of presenting oneself to the outer world. It is also a guide to action and in particular the means by which football players use their bodies in two significant

ways. The first is to design and carry out strategies that enable them to engage in a competitive space, and exploit that space in order to accumulate capital. The second is to carry out strategies that strengthen their distinctiveness and separateness, both from other football players with similar habitus, and from those whose habitus is seen to be inferior. Thus, it can be seen how football players can readily legitimate the dangers and implications accompanying painkiller use, even when they are well understood and predictable.

According to Bourdieu, one's habitus tends towards inertia and institutionalisation. However, they also shift and re-shape in response to changes on the field of power, which can result from external jolts and intercessions. As we have observed (and recommended), first, the rules can be changed. In the case of painkiller use, football regulators can reallocate capital towards those actions and individuals safeguarding bodily capital. Second, the competition between players can change, such as from improvements to education or reward structures, and this can lead to a significant re-allocation of benefits to players, attenuating the need to trade bodily capital for other forms. Finally, the tactics by which power and capital is best secured can change encouraging the fine-tuning of habitus that reward post football retirement bodily capital stocks as well as short-term playing bodily capital. The listed recommendations for shifting greater responsibility for long-term athlete welfare from the individual to employers via mechanisms such as vocational support are well supported in prior studies and dedicated trials can advance athlete welfare.

Our discussion confirms that football players understand that capital is worth fighting and playing for, since it confers the resources for both improving one's social position and securing opportunities for future aspirations. Moreover, the more capital accumulated, the easier it is to acquire a privileged habitus. However, footballers' manipulation of their physical capital leads to further questions as to (1) what exactly drives football players to prioritise one bundle of capital over others, (2) what enables some football players to accumulate more physical capital than others, and (3) what makes one form of capital more prestigious than other forms of capital. As we have demonstrated, the answer to these questions is found when physical capital is understood as an important element in the habitus and the dispositions that frame its actions. If the welfare of athletes is to be protected and painkiller (mis)use is to be managed holistically, the challenge of engaging the controllers of capital in the field of sport will need to be addressed, and collective representation may present one opportunity to overcome unfavourable field-level hierarchies.


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