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Mapping the Potential Societal Impacts Triggered by Elite Sport: A Conceptual Framework

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Abstract

When nations face the challenge of justifying their elite sport development policies, they tend to state that a wide range of societal benefits will 'trickle down'. This argument, however, is being criticised by academics who claim that there is a lack of empirical evidence for the way elite sport influences society. In light of the uncertain/unproven positive and negative societal impacts, this study developed an encompassing conceptual framework that integrates the empirically supported potential societal impacts assumed to result from elite sport. Hence, an extensive mapping literature review regarding the potential positive and negative societal impacts of elite sport was conducted. The process involved interpreting, labelling, clustering and validating. The resulting framework includes ten categories representing 79 sub-categories. It was found that, since the turn of the century, a growing number of empirical studies has increased the realisation that elite sport does not automatically initiate positive societal impacts. Moreover, the various 'dark sides' of elite sport seem to be underestimated. The framework and overall empirical picture of the potential societal impacts of elite sport presented in this paper contribute to progress the field as, until now, no mapping review that captures the full scope of this top-down relationship has been conducted. This paper hopes to make a contribution to the understanding of elite sport as a societal phenomenon. It could be argued that the potential societal impacts assumed to be sparked by elite sport have been identified but are still little understood.

Keywords: elite sport, elite sport policy, elite sport impacts, societal value, conceptual framework

In the early twenty-first century, elite sport[i] increasingly became a policy priority (Green, 2009). However, the escalating costs needed to achieve elite sport's success causes governments to become entangled in an unsustainable, upwardly competitive spiral, leading to excessive spending (Girginov, 2012). When facing the challenge of justifying investments in elite sport to the public, sport policymakers increasingly tend to advocate elite sport's development, stating that a wide range of societal[ii] benefits will 'trickle down'.

> Top-level sport performances make our population proud and contribute to national identity. It unites and provides common stories. This is beneficial, not only to an individual but to society as a whole. It justifies the goal to be a permanent top 10 nation in the world (NOC*NSF, 2017).

The existence of societal benefits highlighted in sports policy documents is however being questioned by many academics (Grix & Carmichael, 2012; McCartney et al., 2010; Weed et al., 2015). They urge sports policymakers to become less ambitious and more effective in generating societal impacts (Coalter, 2007). Five major points of critique are raised in the literature.

Firstly, although many studies claim to measure impact, only a few impact studies are based on theory of change principles. 'Impact' implies a causal relationship between an intervention or action and a change in something. Impact is defined as "the effect of the intervention on the outcome" (Grant Thornton, Ecorys, & Loughborough University, 2011, p. 232), which implies that, in the context of elite sport, the sought-after impacts can eventually turn out to be negative or non-existent. Studies assessing a particular assumed impact should therefore involve the development of a logic model which illustrates the relationship between inputs/activities and the resulting outputs, impacts and outcomes, and explicitly accounts for any counterfactual factors.

Secondly, the current empirical evidence base regarding a range of claimed impacts generated in the context of elite sport is inadequate and fragmented (Frick & Wicker, 2016; Funahashi, De Bosscher, & Mano, 2015; Van Bottenburg, 2013) and often provides mixed and contradictory results (Frawley, 2013). A study on the trickle-down effect of elite sport in Belgium (Flanders) and The Netherlands illustrates the inconsistent nature of the current evidence base. De Bosscher, Sotiriadou, and van Bottenburg (2013) found no consistent relationship between membership levels and elite sporting success across 20 sports. Positive correlations were notable in only half of the sports in which Flemish elite athletes achieved significant international successes.

Moreover, in some sports a negative relationship was found, which made the authors conclude that a trickle-down effect is established only under specific conditions.

Thirdly, it is often argued by academics that elite sports policymakers tend to overemphasise the positive societal impacts and contest or turn a blind eye towards a range of potential negative impacts (Sant & Mason, 2015). For instance, Preuss (2007) provides evidence of significant governmental spending on and prioritisation of elite sport over community sport. Kennelly (2016) found that elite sport perpetuates the disadvantage of poor and oppressed minorities. Scholars also stress concerns regarding issues like gambling and addiction (Rodenberg & Kaburakis, 2013), or how international elite sport competitions fuel nationalism and aggression among sport fans (e.g. Armstrong & Giulianotti, 2002; Billings et al., 2013; Chopra, 2014). Indeed, these elements are seldom discussed by elite sport advocates.

Fourthly, it is important to acknowledge that, intrinsically, elite sport is neither beneficial nor harmful. Consequently, what determines elite sport's benefits and/or harms are the way in which elite sport programmes are structured; the consequent governance and delivery systems that shape these programmes; the manner in which we integrate elite sport with other institutions and/or initiatives to foster particular impacts; and the messages we thus send via elite sport (e.g. Taks, Chalip, & Green, 2015). In other words, there is no societal impact from elite sport per se, but there can be societal impact from the ways we manage, market, finance and use (elite) sport.

Finally, as a consequence of the above issues, it remains unclear what societal impacts could potentially result from the various elite sport practices, and theory development is still at an early stage. In the past two decades, a wide variety of societal impacts that are assumed to accrue from elite sport have been under academic investigation. The most frequently scrutinised societal impacts include international prestige (Heere et al., 2013), diplomatic recognition (Merkel, 2013), a 'feel good' factor (Hallmann, Breuer, & Kühnreich, 2013), increased levels of sport participation (Weed et al., 2015) and economic impacts (Downward, Dawson, & Dejonghe, 2009). In line with this, many corporations and organisations (including the International Olympic Committee and the United Nations) have recognised elite sport as powerful in promoting education, culture, health, sustainable development and peace. However, there is another stream of research that points out several negative impacts on society—for example, issues such as gentrification (Kennelly & Watt, 2012), doping (Connor, Woolf, & Mazanov, 2013), hooliganism (Armstrong & Giulianotti, 2002), or governments

hosting major sporting events that run over budget and create a government deficit (Preuss, 2007). Nonetheless, to date, it remains unclear what societal impacts are more (or less) likely to occur due to elite sport. Moreover, there is no overview of what societal impacts are supported by empirical evidence.

In light of the problematic evidence base and resulting limited understanding of the role of elite sport in society, academics are calling for broader, intra- and inter-disciplinary theoretical conceptualisations of the impacts of elite sport. For instance, Houlihan, Bloyce, and Smith (2009) stress the need for a holistic conceptualisation of the sports sector "as being an element of welfare provision, a component of national cultural identity, a segment of the post-industrial economy and a diplomatic resource" (Houlihan et al., 2009, p. 9). To date, an all-embracing framework mapping the empirically investigated potential societal impacts of elite sport does not exist. Moreover, it is still unclear what potential positive and negative impacts are and could (not) result from leveraging elite sport. As such, the objective of this paper is to map the potential positive and negative societal impacts that might occur by means of the elite sport context.

Mapping the potential positive and negative impacts of elite sport is an initial phase of theory stalking and has, according to Pawson (2003), utility in its own right. Current elite sport policy documents tend to be focused on the same relatively narrow range of impacts (most often there are references to the stimulation of community sport participation and national pride or economic impacts). Therefore, the focus of this study is on unravelling the variety of potential impacts that can flow from the elite sport context. Based on a mapping review of empirical studies, this paper contributes to academic knowledge by identifying the range of societal impacts (both positive and negative) that can potentially flow from elite sport. Thus, this paper makes a modest contribution to an understanding of the potential impacts of elite sport. A literature review of this type is perceived to be a valuable tool that offers policymakers, practitioners and researchers an explicit and transparent means of identifying narrower policy and practice-relevant review questions (Weed et al., 2015). This is only a first step forward but is necessary to identify the gaps in research and determine a future research agenda.

Method

The need for policy and practice that is informed by an objective and thorough review of the evidence base, together with the need to make the most of existing evidence, is being increasingly recognised. Evidence reviews (ER), in their various forms, represent ways of searching for, reviewing and summarising evidence to

help answer specific questions. There exists a spectrum of ERs that range in detail and rigour from literature reviews to systematic reviews (SR). The current study conducted an ER that Grant and Booth (2009) would type as a mapping review/systematic map. This type of ER enables us to interpret, classify, organise, condense and synthesise a large collection of separate publications pertaining to the various potential societal outcomes under empirical study (Thomson et al., 2018). Moreover, a mapping review enables the identification of gaps in the evidence base. Mainly due to the inclusion of a high number of studies, mapping reviews usually do not include a quality assessment process. However, a characterisation of studies on the basis of study design enables being critical about the usefulness of the available research by testing it against a hierarchy of evidence. The mapping review provides an understanding of the volume and characteristics of the evidence available on a certain topic and makes it more accessible for further scrutiny. The mapping review can therefore be viewed as a type of ER consisting of several 'Quick Scoping Reviews' (QSRs) on a broad range of research topics (for more details on QSR see Collins, Coughlin, Miller, & Kirk, 2015). This type of ER used, although resource and time intensive, has been found to be suited to meet our research objectives. According to Collins and colleagues (2015) are QSRs designed to "provide an informed conclusion on the volume and characteristics of an evidence base and a synthesis of what that evidence indicates in relation to a question" (p.11). To conclude, an extensive mapping review/systematic map was conducted in order to track down the empirically investigated societal impacts that might occur by means of the elite sport context. Accordingly, this literature review provided a solid base that enabled us to detect the various types of elite sport impacts under study. Following, the various types of impacts under study were listed and categorised into a final framework.

Mapping Review Methodology

The Cochrane Collaboration recommendations (Higgins & Green, 2011) have guided the systematic mapping ER, particularly in identifying the key words for the database searches, and tracking down and interpreting relevant studies. During the conceptualisation of this study, the lead researcher first ran an exploratory search based on a range of terms often used in the literature. This way, we were able to identify additional keywords for inclusion. It was found that the literature suffers from a lack of consistent terminology and definitions (Thomson et al., 2018). For instance, while the majority of scholars investigating the long-term impact of elite sport events use the term 'legacy', Hiller (2000) favoured the term 'outcome' and Gratton and

Preuss (2008) ‘structure’. Hence, defining key concepts was an important point of deliberation for the research team. This exploratory search returned over 30,000 hits and highlighted the tension between incorporating a range of distinct but related terms and creating a valid boundary for what was to be included or excluded within this mapping review (Pickering & Byrne, 2014). We agreed that in order to achieve our research objective, which was to detect all empirically investigated potential societal impacts, we could not strictly limit the number of key words as is the case in, for example, systematic literature reviews (e.g. Thomson et al., 2018). Had we limited our search to a few keywords, we would not have been able to detect numerous relevant empirically investigated research topics. Additional File 1 provides an overview of the keywords that our search of electronic journal databases required to be present in the key fields of the title, abstract or keywords.

Insert link to Additional File 1

In this study, three electronic databases (SPORTDiscus, Web of Knowledge and Google Scholar) were used to identify the variety of research topics under empirical investigation. In addition to peer reviewed papers, (chapters of) edited books, research reports and conference papers were included. Articles published between 1978 and 2016 were included. Non-empirical studies—for example, media portrayals, letters, commentaries, editorials, expert opinions, abstracts and reviews without original data —were excluded. Only empirical studies that investigated one or more societal impacts that can flow from elite sport were included. Thus, studies that used a mix of real and estimated data (e.g. cost estimation models) were included. The initial filtering of articles was undertaken based on the title of the literature source; next, we applied a second filter based on the content of the abstract (n=4,492). The full text was then reviewed for 832 articles, reports and papers that passed all inclusion criteria; finally, a total of 362 sources were included in the review and the development of the conceptual framework (see Appendix 1). As a reminder, the purpose of the literature review was to detect the various potential impacts under empirical investigation, not to include all relevant academic studies addressing the impacts.

Mapping the Literature

The mapping of literature involved an extended and iterative process of cluster building, critiquing and revision (Breitbarth & Harris, 2008). Inductive procedures were employed to cluster relevant raw data into first-order and second-order categories until interpretable and meaningful key categories were found (Gliner, Morgan, & Leech, 2011). The build-up started from an author's quote or the purified main result of an empirical academic study detected in the ER. From there, clusters were made based on the topics under study, thus forming an expanding web of grouped empirical findings. Finally, overarching terms were given to the clustered groups. The categorisation process had to be approached iteratively to ensure the categorisation was consistent. In order to increase validity and interpretive consistency (Teddlie & Tashakkori, 2003), the list of categories and sub-categories derived from the literature was presented to an international group of researchers with expertise in elite sports impacts, and they were asked to give feedback. Where different interpretations emerged, the items were regrouped and discussed until a consensus was achieved. Efforts were made to develop clusters that possessed face and content validity. However, it is impossible to generate clusters that were totally construct valid because of supplementary context-specific factors that influence the impacts of elite sports (Peter, 1981).

Quality of evidence

Moreover, the nature and the quality of the literature was assessed based on the 'hierarchy of evidence'. The hierarchy of evidence refers to a tabular representation (sometimes presented as a pyramid) of the relative strengths of various investigational methodologies that built the evidence of the included literature. Generally, the higher up the hierarchy a methodology is ranked, the more robust it is assumed to be. There are various forms of the hierarchy of evidence that have evolved from Guyatt et al. (1995) and Sackett et al. (1996) studies on medical literature. As can be viewed in table 1, the different types of studies in terms of the (increasing) strength of the evidence are graded from 'expert opinions' to 'systematic reviews and meta-analyses', as proposed by Taylor, Davies, Wells, Gilbertson, and Tayleur (2015). However, researchers (e.g., Tranfield, Denyer, & Smart, 2003) also indicated that the hierarchy is not absolute as for example an extensive, soundly conducted cross-sectional study may provide more convincing evidence than a poor cohort study. Moreover, the nature of evidence is rooted in the ontological and epistemological assumptions and privileging one research method over another can trigger strong resistance in specific fields.

Results

A total of 391 empirical studies were reviewed empirically investigating societal impacts presumably leveraged by elite sport. By interpreting, labelling and clustering the data, this research eventually identified a total of 128 isolated topics that were framed into 79 sub-categories, which are arranged into ten broader, more abstract categories.

Elite Sport as a Varying Context

The various ways in which elite sport takes shape in our society provides distinct, different contexts. One common train of thought that underpins the reviewed literature is the assumption of an inspiration or demonstration effect (Weed, Coren, & Fiore, 2009) of elite sport. The inspiration effect is alleged to exist due mainly to four types of context (de Bosscher et al., 2013): when organising elite sporting events; in the case of outstanding sporting performances; in a context were athletes and teams are viewed as role models; and in a context shaped by practices of elite sport stakeholders. The literature on the impact of organising (mainly mega) sporting events seem to be more advanced than literature regarding other contexts. In the past, academics have focused predominantly on measuring event impacts related to the economy (e.g. Downward et al., 2009) and tourism (e.g. Weed, 2009). Since the turn of the century, other societal impacts have been gaining increasing attention (McCartney et al., 2010). In short, the available literature is fragmented, anecdotal and often provides contradictory results (de Bosscher et al., 2013). The latter authors argue that the creation of societal impacts on the wider population does not occur automatically due to successful elite athletes or from the organisation of elite sport events (e.g. Chen & Henry, 2015; Feng & Hong, 2013; Gratton & Preuss, 2008), but involves the planned and coordinated actions of a range of stakeholders (Chalip, Green, Taks, & Misener, 2017) like sponsors, sports policymakers, corporations, volunteers and the media. Regarding athletes and teams as role models, studies have confirmed that sport celebrities can have an inspirational effect, especially among young people, leading to copying behaviour and values (Meier & Koenen, 2010). This is largely influenced by the availability of a role model (e.g. through media exposure) and the perceived relevance and similarity of an individual to the role model (Mutter & Pawlowski, 2014). However, academics claim that the impact of athletes as role models is poorly understood (e.g. Lyle, 2009; MacCallum & Beltman, 2002). Finally, a study by Frick and Wicker (2016) is an example of evidence of the trickle-down effect of other stakeholders of elite sport—that is to say, the number of new referees in German football was positively

affected by referees who were promoted to the status of a first Bundesliga referee as they were regarded as role models.

The eventual societal impact is determined by the nature of the elite sport context. For instance, just recently, there was tremendous variation in how countries reacted to succeeding or failing to qualify for the FIFA World Cup 2018. When traditional football countries like Italy and The Netherlands did not manage to qualify, the mood was despondent among a vast part of the population, varying from disbelief to anger. In contrast, Egypt managed to qualify for the first time since 1990, which led to public scenes where "tears were rolling from the eyes of everyone". For other nations, to qualify (or not) was deemed logical, hence it did not lead to noteworthy effects.

Thematic Categorisation of the Demonstrated Potential Societal Impacts that Arose in the Context of Elite Sport

All 79 positive and negative societal impacts that emerged from the literature review were clustered into ten categories: 1. Social equality and inclusion; 2. Collective identity and pride; 3. Ethics and fair play; 4. Feel good and passion; 5. Fans and (media) attraction; 6. International prestige and image; 7. Athletes' ability and quality of life; 8. Sport participation and health; 9. Sponsors and commercial activity; and 10. Local consumption and living conditions. Figure 1 provides a summary of the end result of the labelling and clustering process—the so-called Mapping Elite Sports' potential Societal Impact (MESSI) model.

Insert Figure 1

The first category, 'Social equality and inclusion' (category 1) refers to the potential of elite sport, when properly leveraged, to bridge different cultures, thereby promoting harmony between different cultural groups and socioeconomic equality (e.g. social mobility) (Berry, 2011; Heere et al., 2013; Hermann, du Plessis, Coetzee, & Geldenhuys, 2013). In contrast, research into the impacts of, for example, football shows that patterns of manifest and institutional forms of discrimination (e.g. sexism, exclusion, exploitation, racism, human trafficking, etc.) continue to shape the experiences of minorities and limit minority involvement in the game (Bradbury, 2013).

Scholars have provided a significant amount of evidence regarding the second category, 'Collective identity and pride' (category 2), which indicates that elite sport, more than most other activities and spheres of social life, provides occasions for the public expression of national values, pride, collective unity, identity and nationalism (Coakley, 2010; Elling, van Hilvoorde, & van den Dool, 2014; van Sterkenburg, 2013). Moreover, international sports events are used to highlight national symbols and present athletes and teams as representatives of nation states. A series of authors have warned that the Olympic Games, for example, are outlets for nationalism which can fuel rivalry and aggressive behaviour (e.g. Armstrong & Giulianotti, 2002; Billings et al., 2013; Chopra, 2014).

The third category, 'Ethics and fair play' (category 3), emerges from Loland and McNamee's (2000) conjecture that although elite sport is often associated with unethical practices (sub-clusters corruption/crime, competitive trait, aggression/violence, doping, unfair play and other deviant examples), "sporting games can stand out as a paradigmatic practice of the possibility of moral dialogue that is so important in our modern, pluralistic societies" (Loland & McNamee, 2000, p. 76). Evidence suggests that elite sport provides an international platform for social debate (Tomlinson, 2014). In contrast, harmful scandals regarding corruption and fraud among the international sport federations are well reported (e.g. Numerato, 2009).

Category 4, 'Feel good and passion', refers to the ways in which sports fans who attend or watch live sporting events derive a pleasurable form of excitement, happiness and satisfaction (e.g. Hallmann et al., 2013; Kavetsos & Szymanski, 2010). Elite sport is an outstanding example of an activity in modern society that creates opportunities for a controlled decontrolling of restraints on emotions and an escape from everyday life (e.g. Kim, Zhang, & Ko, 2011). On the down side, following a sport match there can be anger, disappointment, frustration and hostility (e.g. Hu & Bedford, 2012).

Next, the 'Fans and (media) attraction' category (category 5) clusters literature on societal impacts related to the attractive power of athletes and sport events which enjoy a great deal of worldwide media coverage (Dolles & Söderman, 2008). Mass media and the commercialisation of sport and sports personalities boost the popularity of elite sport (e.g. Bouchet, Bodet, Bernache-Assollant, & Kada, 2011; Shapiro, DeSchriver, & Rascher, 2017). A professional sports team has the potential to build brand equity by capitalising on the emotional relationship it shares with its fans (e.g. Underwood, Bond, & Baer, 2001). Research concludes that football followers, for example, favour a specific club and often wish to display their allegiance through a

consumption-dependent display of club products and paraphernalia (e.g. Giulianotti & Robertson, 2004). The coverage of professional sports also regularly highlights cases of cheating (e.g. doping), conflicts (e.g. unethical athlete behaviour), decadence (e.g. extremely high wages) and controversies (e.g. ambush marketing), which can have a significant adverse impact on the image of sport (e.g. Chanavat & Desbordes, 2014; Lee, Bang, & Lee, 2013).

The next category, 'International prestige and image' (category 6), is based on studies that found that a prestigious 'showcase effect' sets in as sport offers an arena for countries to compete with each other to gain international recognition and prestige (e.g. Jennings, 2013; Merkel, 2013). Indeed, countries bidding for major events sometimes do so to create a powerful public stage for their ideological battles (Merkel, 2013) or as propaganda, or because they want to use sporting events as a foreign policy tool to build relations with as many countries and people in the world as possible to gain soft power. Qatar, for example, promotes sporting success, as it is a vehicle for securing a global profile and setting itself apart from its neighbours (Reiche, 2015).

The final four categories have in common that they relate to potential societal impacts due to developmental and leveraging processes triggered by elite sport—namely, positive and negative impacts because of personal involvement in elite sport as an athlete (category 7), consumption of elite sport(category 8), association or partnerships with elite sport (category 9), or hosting elite sport events(category 10).

Category seven, 'Athletes' ability and quality of life' (category 7), covers sub-categories related to the development of life skills through involvement with elite sport, the quality of life of athletes, the pride of being an elite level sportsman/woman, fame, and the role model function of athletes (e.g. Lyle, 2013; Vescio, Wilde, & Crosswhite, 2005). There is rich literature investigating the impact of elite sport stressors on the physical and mental quality of life of athletes. Several physical and psychological challenges (e.g. injuries, social isolation, pressure to perform) may pose risks to the elite athlete's wellbeing (e.g. Ruedl et al., 2012).

It is believed that athletes, as 'idealised creations', provide inspiration, motivational direction and meaning for people to develop an active lifestyle. Impacts related to the category 'Sport participation and health' (category 8) are nonetheless contested. For example, the notions that co-experiencing an athlete's achievement—by watching an event live or through the media—would inspire one to actively change one's behaviour, or that it could alter personal characteristics (volunteering, character building, self-efficacy, hard

work, risk-taking, etc.) have been academically disputed (e.g. Armour & Duncombe, 2012; Guest & Cox, 2009). Moreover, although elite sport practices (CSR-related activities and event spin-offs) tend to put an emphasis on education and learning (e.g. educational programmes linked to an event), these are generally not well evaluated and there is currently little evidence of their effectiveness (e.g. Guest & Cox, 2009). Studies reporting negative impacts like increasing body image issues and overall sport participation rates among the youth have led some authors to theorise about a discouraging effect. Several authors argue that discouragement from participating in sport among youth is the result of experiencing a competence gap with successful athletes (e.g. Feddersen, Jacobsen, & Maennig, 2009; Hogan & Norton, 2000).

The 'Sponsors and commercial activity' category (category 9) is perhaps the most distinct category of elite sport, as it is assumed that elite sport provides financial returns to a variety of stakeholders that are involved in it (e.g. Downward et al., 2009). The 1984 Los Angeles Olympic Games were the first to make an explicit assessment of the economic impact of the Olympic Games (Kasimati, 2003). Ever since, sporting event organisers have increasingly recognised the economic contribution events can make, and they have increasingly tried—though with mixed success—to maximise financial returns (e.g. Vilakazi, 2014). The literature confirms that economic gains are far from certain, and mega-event organisers suffering from financial hangovers are abundant throughout history (Barclay, 2009). In general, sporting organisations can benefit from the interconnection of sport, the media and business (e.g., Tomlinson & Young, 2011). Partnerships and sponsorship deals hypothetically lead to direct economic impacts relating to merchandise sales, TV rights, jobs or sport industry assets (e.g. Couvelaere & Richelieu, 2005).

Finally, the tenth category, 'Local consumption and living conditions' (category 10), clusters the local beneficial and harmful impacts of elite sport-related activities. Incorporated studies report research results ranging from increased tourism, consumption and employment to exploitation costs and the impact on the living conditions within host communities. For instance, a meta-evaluation of the 2012 London Olympic Games concluded that the event led to a displacement of regular tourists who were deterred by overcrowding, disorder and price rises (Grant Thornton, 2012). However, the average spend of the 2012 Olympic Games visitors was around double that of an average tourist (Office for National Statistics, 2012). Especially when hosting mega-events, cities tend to try to regenerate neighbourhoods by investing in, for example, public transportation, local infrastructure, hotels and green zones (e.g. Brown, Massey, & Porter, 2004; Hermann et

al., 2013). However, research confirms that a net local economic benefit is far from certain, as there is an aftermath with regard to excessive temporal and lasting costs ('white elephants') (e.g. Smith, 2012), and often limited noticeable positive impacts occur for the community (e.g. McCartney et al., 2010). Several reports showcase examples of events for which low-income neighbourhoods have been torn down in order to build new venues and roads (e.g. Agha, Fairley, & Gibson, 2012). Also, there is a large body of evidence of negative environmental impacts (including air pollution, waste, etc.) (e.g. Friedman, Powell, Hutwagner, Graham, & Teague, 2001).

Quality of Evidence

Since the last two decades, a more detailed body of evidence on the potential of the association between elite sport and social, economic and political spheres has been developed. However, although in some more advanced than others, the overall level of evidence is rather weak across the categories of the MESSI framework. Table 1 provides a visual summary of the findings for research designs used in extant elite sport impact research. Significant variations in research designs used across the different categories of the MESSI framework are noticeable. Overall, almost a third (27%) of the articles in the sample were found to be case studies that predominantly used a qualitative research design (interviews, focus groups, observations, ethnographies…). There were several articles included in the sample that used quantitative research designs, such as time-series studies (19%), cross-sectional (scale-based) studies (19%), financial evaluations and trends (16%). Ten percent of the included studies are content analyses of various sources like policy documents or media coverage. Randomised controlled trials (0%), cohort studies (1%), and case-control studies (2%), robust research designs with a strong tradition in medical sciences, are nearly non-existing. Mixed method designs were used in 11% of the sample.

Insert Table 1

Discussion

This paper aimed to detect what positive and negative impacts are empirically demonstrated to potentially flow from the various ways elite sport is (and has been) organised, managed and marketed in

334 society. A first step in providing the state of the art in empirical findings is mapping the relevant potential
335 positive and negative impacts that were found in empirical studies (e.g. Bailey, Hillman, Arent, & Petitpas,
336 2013). To our knowledge, a holistic overview of the empirically demonstrated (albeit limited) societal impacts
337 in the various contexts of elite sport was lacking. Thus, while this paper has attempted to address this gap, this
338 is only a modest contribution to the theoretical conceptualisation of the impacts generated in the context of
339 elite sport. This study represents a one-sided contribution to the literature and explores what potential positive
340 and negative impacts can be triggered by elite sport; accordingly, the study does not provide answers to
341 questions about why and how these impacts occur, or about what mechanisms are associated with them. Nor
342 does the study offer any evidence about possible indirect influences such as media coverage, sponsorship,
343 sport facilities, strategies or programmes that may activate an impact on society. It was found that when facing
344 the challenge of justifying investments in elite sport to their public, elite sport policymakers increasingly tend
345 to advocate elite sport development by stating that it will 'trickle down' a wide range of societal outcomes.
346 However, this train of thought is criticised by academics (Grix & Carmichael, 2012) as being a storyline that
347 often impacts sport policymaking more than the quality of the available evidence (Houlihan et al., 2009). It
348 seems to be hard to identify how, when and to what extent certain conditions determine sought-after societal
349 impacts of elite sport. What is nonetheless clear is the inconsistency between the alleged societal benefits and
350 the ways in which elite sport is currently organised, managed and marketed (Grix & Carmichael, 2012). For
351 example, while the social and economic impacts of mega-events are often disappointing (McCartney et al.,
352 2010), interest is stimulated in the approach of leveraging, viewing mega-events as a resource which can be
353 leveraged to achieve impacts which would not have happened spontaneously (Smith, 2014). In other words, if
354 we believe that elite sport can and should enable particular impacts, then we need to ask how elite sport
355 should be envisioned and implemented to enable and, ideally, optimise those impacts.
356 The ER revealed that the current empirical evidence is fragmented, inconsistent, and often provides
357 contradictory results. The hierarchy of evidence testing demonstrated a need for the research community to
358 ensure research contributions have robust and appropriate research designs. For instance, when measuring
359 impacts of major sporting events, it seems that academics have traditionally used study designs where
360 causality is difficult to establish. Many of those studies used secondary data sources and estimate models to
361 explore the relationship between the event and tourism, employment, housing, GDP and stock markets. A

362 further criticism of elite sport impact research is the strong use of narrative evidence with the subjective
363 perceptions of individuals playing a key role. This finding resonates with other calls for the research
364 community to contribute empirical research, rather than offering assertions or opinions (Weed & Dowse,
365 2009). The tendency of using case studies with qualitative methods (almost a third of the sample) may be
366 justifiable given the intangible or emergent nature of some phenomenon under study, as such research
367 contexts justify exploratory research. Overall, the quality of evidence for elite sport in relation to several
368 outcome areas is relatively weak and further longitudinal data analysis, quasi-experiments or mixed-method
369 designs are required to establish causality. Indeed, sport management scholars have called for the need of
370 more holistic research frameworks and the adoption of mixed methods approaches (only 11% of the studies in
371 the sample use mixed method designs) (Girginov & Hills, 2009; Grix, Lindsey, De Bosscher, & Bloyce, 2018;
372 van der Roest, Spaaij, & van Bottenburg, 2015). Following Thompson and colleagues (2018), it is suggested
373 that pushing forward with inter- and transdisciplinary research designs will assist in providing a more solid
374 evidence-base to guide the decision-making of practitioners and policymakers.
375 One of the key points that emerged from the available evidence is that the delivery of societal impact
376 does not appear spontaneously in most cases, but that it entails putting in place complex governance
377 mechanisms and programmes to steer collective actions. On the one hand, it seems that elite sport can deliver
378 a context where people are united around collective moments and interests and where that momentum is used
379 to initiate positive societal impacts. On the other hand, elite sport practices in their many forms are likely to
380 have differential impacts if provided in different ways to different groups in different situations. For example,
381 the negative impacts are often reserved for the non-elite and disadvantaged groups in our society. Even though
382 elite sport is something all can enjoy watching, the well-connected, with money and power, are often better
383 able to influence impacts to their advantage than the poorer in our society (Baviskar, 2014). As such, in order
384 to develop effective programmes, elite sport advocates should be able to explain why an elite sport
385 programme/practice is expected to work and how it is designed to make a difference in the lives of people, or
386 how it is predicted to improve society (Chalip et al., 2017). That is because the mechanisms by which positive
387 societal impacts may be created are extremely complex and not automatically transferable to any other
388 situation or context (Grant Thornton et al., 2012). It is therefore important to develop a broader understanding
389 of what works, for whom, in what circumstances, and why (Pawson & Tilley, 1997), and thus to develop a

programme theory for potential societal impacts indicated by the MESSI framework. As such, the current mapping of literature is only a first step in developing a long-term research agenda.

Another key element that transpired from the literature is the several cases of overrating and overpromising the societal impact of elite sport. For instance, the London Olympics' goal to inspire a generation was ambitious, as it meant that deep-seated behaviour patterns, social structures and relations needed to be modified (Girginov & Hills, 2008). To exemplify this, generally, a variety of antecedents to sport participation are outlined in literature that explain that the impacts of elite sport are selective and do not occur for all people in the same way in all situations. Among others, someone is more likely to participate in sport if he is male (gender), non-senior (age), has active children and is not a single parent (household composition), is native (nationality), has a managerial status or high income (job status), lives in an urban area (location), regularly watches live sports (sports fan), has positive social influence (of friends/family), does not experience a lack of time (time constraints), does not drink a lot of alcohol and does not smoke (Hallmann et al., 2013; Kumar, Manoli, Hodgkinson, & Downward, 2018; Wicker & Sotiriadou, 2013).

Moreover, there is overwhelming evidence that a behavioural change process is not easily instructed (e.g. Willem, de Rycke, & Theeboom, 2017). Thus, all stakeholders involved should acknowledge the complexity of a behavioural change process (Mallett, Kawabata, Newcombe, Otero-Forero, & Jackson, 2007) and become more realistic about what societal impacts they can aim for, and the extent to which impacts will occur. Moreover, unfulfilled promises lead to anger and resentment about the spending of public money on elite sports development (Funahashi & Mano, 2015).

By examining the available evidence, we identified three further points of reflection. Firstly, impacts on the population are often dictated by the degree to which individuals are involved with elite sport. Unsurprisingly, positive impacts are more easily found among groups of people who are frequently involved with elite sports; however, mostly one-off major events are under study, while second-tier events and more rooted forms of elite sport that take place on a more regular basis, such as weekly competitions or event portfolios (Clark & Misener, 2015), are given considerably less attention. Secondly, empirical studies point out that a number of impacts that flow from elite sport only trigger short-term changes (e.g. feelings of intense pride and wellbeing) in a stable characteristic (e.g. national identification) that cannot easily be manipulated (Elling et al., 2014). Therefore, the momentum by which societal impacts can best be leveraged shifts

418 severely. Thirdly, there seems to be a shortage of studies with designs that are sensitive enough to detect
419 intangible societal impacts (Wicker & Sotiriadou, 2013). Preuss (2018) argues that some intangible
420 consequences of elite sport events are non-measurable by definition. As a consequence, we may be able to
421 describe intangible impacts, but we may fail to evaluate them. Thus, in an attempt to find a valid method,
422 "scholars may use indirect measures or contingent valuation measurement to get at least near to a value for
423 intangible effects" (Preuss, 2018, p. 14). Studies rarely adopt mixed method or longitudinal approaches and
424 they are therefore unable to measure long-term effects (McCartney et al., 2010). Many studies are based on
425 estimated rather than primary data assessments, or they display self-reported perceptions instead of actual
426 measures. As such, questions remain as to what extent intentions will translate into concrete action (Hills,
427 Bradford, & Johnston, 2013). This is one of the limitations of the MESSI framework. Although it maps
428 studies with empirical data only, the perception-based evaluations that are often used are not evidence for a
429 particular level of impact. There is an enormous danger of masking unattractive realities while reifying self-
430 reports of attitudes or beliefs, and an equivalent danger of taking the interview claims of sport administrators
431 and aficionados at face value (Coalter, 2013). Perceptions are important to understand, but primarily so with
432 reference to the objectively and independently demonstrated realities we can affirm. This research is therefore
433 a call for more complex research designs based on theory of change principles that pay attention to the deeply
434 rooted mechanisms behind the impact, rather than the impact itself.
435 Another limitation of this study is that although several distinct categories were detected by the clustering
436 process, clearly the categories of the MESSI framework include overlaps and cross-overs. For example, there
437 is evidence of a positive correlation between feelings of happiness and economic variables such as economic
438 productivity (Oswald, Proto, & Sgroi, 2015). Hence, alongside elite sports' direct economic impact, happiness
439 associated with elite sport has economic value in itself. Likewise, elite sport practices can potentially trickle
440 down into an exponentially increasing number of negative impacts outlined in the MESSI framework. For
441 instance, a local authority may allocate financial support to a football club to build a new stadium, but if the
442 club is poorly managed and gets relegated to a lower division, this causes a significant decrease in attendance.
443 The social and political consequences are that the city is left with an expensive stadium. It also degrades local
444 economic activity around the site, ultimately leading to higher unemployment rates and a decrease in the city's
445 overall welfare. Consequently, it is misleading in most cases to argue that elite sport leads to certain societal

impacts. That is, “impacts are compounded by the difficulties in controlling for intervening and confounding variables which will also influence attitudes and behaviour” (Coalter, 2007, p. 22). A greater understanding of the unintended consequences of elite sport, the factors which make successful impacts more likely, and insights into how transferable findings are from one context to another would be valuable.

In conclusion, and as noted in the introduction, there is no societal impact from elite sport per se; rather, societal impacts are due to the ways we manage, market, finance and use elite sport. For this reason, it is clear that elite sport as a resource is mediated by a range of micro, meso and macro factors or elements that can increase or decrease its societal impact (Coalter, 2013). Despite regular findings to the contrary, there seems to be hope that a range of positive societal impacts can be triggered by elite sport, but only if there is a concerted effort among all stakeholders to make this happen (Chalip et al., 2017). In the future, it could be examined whether elite sport policies and interventions aimed at promoting certain societal impacts take into account the determinants of (behaviour) change (Chen & Henry, 2016) and alter the context wherein an initiative is implemented (Rycroft-Malone et al., 2012). For instance, projects and programmes that referred to the London 2012 Olympic Games were expected to be evaluated based on a theory of change structure—an explanation of why different interventions were developed and what they were designed to achieve (Grant Thornton et al., 2011). Logic chains demonstrate how activities, and the inputs these entail, might deliver key outputs and outcomes, and therefore contribute to priorities and target impacts. The logic chain must include an assessment of the analytical assumptions and relevant external factors that have an impact on the inputs, outputs and outcomes (Grant Thornton et al., 2011). Thus, although logic chains also have limitations (the impact of the elite sport context remains difficult to isolate), they could provide an important tool for planning and evaluating interventions and programmes.

Conclusions

The mapping of empirical research regarding the societal impacts of elite sport presented in this paper progress the field as, until now, no review that captures the full scope of this top-down relationship had been conducted. This paper detected and clustered into a conceptual framework 79 societal impacts assumed to be triggered by elite sports by highlighting ten specific categories. Elite sports research, like all inquiry, can benefit from having a variety of ways of articulating the state of the art in literature to inform policy. The MESSI framework can help with this task.

It was found that the evidence regarding elite sport's positive societal impacts provides, at best, mixed results. Thus, it could be argued that a positive framing of elite sport and path dependency informs elite sport policy decisions more than the available empirical evidence (Houlihan et al., 2009). It could also be stated that the potential societal impacts of elite sport are identified but little understood. There are various possible explanations for this.

Firstly, by analysing the hierarchy of the available studies, it was found that the current evidence base fails in developing robust research designs (e.g. shortage of mixed methods studies) that are sensitive enough to detect and isolate certain complex societal impacts. Secondly, it is our observation that the literature on elite sport's societal impacts is developing in the right direction but has mostly failed to provide answers that can inform and guide policy. Because of the complicated nature of the impacts, the available research has not fully succeeded in finding clear evidence about who, what, where and how elite sport triggers societal impacts and legacies. Finally, there is an increasing realisation that elite sport does not automatically lead to all of the impacts desired (Taks et al., 2015), and that stakeholders must put in place mechanisms that anticipate the impetus that elite sport offers.

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Figure 1

Mapping Elite Sports' potential Societal Impact (MESSI) framework.

Context	Events worldcups - Olympic Games - championships			Athletes & teams athletes - footballplayers - sportsteams		Successes winning medals - games - records		Stakeholders coaches - sportorganisations - sponsors	© De Rycke & De Bosscher, 2019
Category	**1. Social equality & inclusion**	**2. Collective identity & pride**	**3. Ethics & fair play**	**4. Feel good & passion**	**5. Fans & (media) attraction**	**6. Prestige & image**	**7. Athletes ability & quality of life**	**8. Sport participation & health**	**9. Sponsors & commercial activity**	**10. Local consumption & living conditions**
Potential positive impacts	Integration Social equality Inclusion Social justice Socio-economic equality	Community identity Community pride Socializing opportunities	Ethics Symbolism/ rituals Fair play Social debate	Pleasure Special experiences Well-being Passion	Beauty of sport Fandom Celebrities Media consumption Sport knowledge	Globalization International prestige Political power Peace building Country/city marketing	Fame Role model function Quality of life Life skills	Identification Sport participation Volunteering Adoption qualities Health awareness	Economic boost Sponsorships Media rights Sport industry assets Commercial activity Innovation Fundraising	Consumption Employment Tourism (sport) infrastructure Greening
Potential negative impacts	Sexism Exclusion Exploitation Discrimination	Opposition & rivalry Chauvinism Shame	Corruption & fraud Hooliganism Deviant examples	Disappointment Failure	Gambling (addiction) Repulsion Drop sports' image	Soft power Bad international image War propaganda	Pressure Injuries Safeguarding issues Post-career depression Doping	Discouragement effect Unhealthy lifestyle Distorted body image	Association with scandals Financial hangover	Legacy costs Environmental impact Declined living conditions Excessive investments

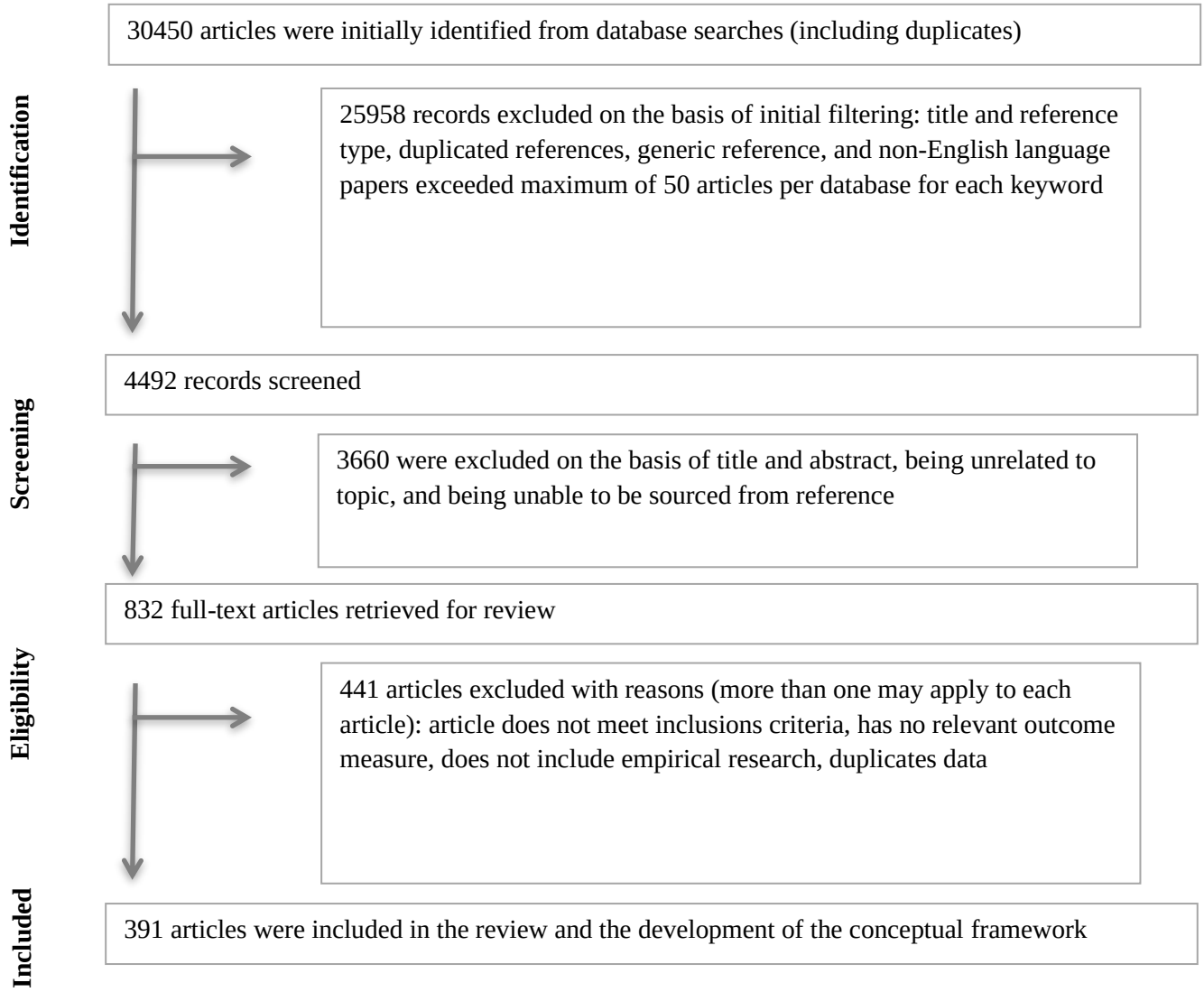
Table 1

Hierarchy of evidence of the included studies (n=391). Overview based on the 10 categories of the MESSI framework.

Rank	Methodology	Example/description	Category										Total
			1	2	3	4	5	6	7	8	9	10	
A	Systematic review/ meta-analysis	Reviews of data that use transparent and rigorous methodology (e.g. statistical analysis of results)	Not included in this study sample										
B	Randomised Controlled Trials	Clinical trials with clear methodology. They use randomised participants and control groups.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
C	Cohort study	A form of longitudinal study. Follows a group of people with a common or defined characteristic. Can be prospective or retrospective.	0%	0%	3%	6%	0%	0%	4%	0%	0%	0%	1%
D	Time-series study/ trends	A form of longitudinal study (not panel). Revisits a cross-sectional study or similar after a period of time has elapsed and compares the data.	4%	27%	3%	25%	8%	17%	0%	32%	3%	41%	19%
E	Case-control/ experimental	Studies that do not use randomised participants but compare two existing groups (one is a control group).	0%	0%	3%	0%	0%	0%	19%	0%	3%	0%	2%
F	Cross-sectional study/	Provides data on entire populations based on a (representative) sample. Collects data at a defined time.	23%	33%	31%	19%	21%	4%	23%	41%	10%	0%	19%
G	Case study/ programme/ qualitative evaluations	Intensive analysis of an individual, group, intervention or event. Often descriptive or explanatory.	32%	8%	36%	13%	38%	50%	54%	26%	18%	22%	27%
H	Economic evaluations/ financial trends/ Contingent valuation studies	Employ economic analysis methods to quantify the economic value of an intervention or activity. Including financial trends analyses.	0%	2%	0%	25%	0%	0%	0%	0%	65%	36%	16%
I	Content analysis/ reviews of documents	Forms of content analysis or review of documents or other sources. Including analysis of media coverage.	33%	20%	0%	0%	29%	21%	0%	0%	0%	0%	10%
J	Policy brief Expert opinion/ Scientific statement	Including opinions from well-respected authorities based on evidence, data from secondary sources, descriptive statistics.	9%	10%	25%	13%	4%	8%	0%	0%	3%	1%	7%
	Mixed - methods	Use of more than one method of data collection or research. Including research with a set of related studies	5%	2%	17%	6%	0%	29%	12%	21%	23%	8%	11%
		N	57	51	36	16	24	24	26	34	40	83	391

Appendix 1

Flowchart results literature search.



Additional file 1

Keywords used for inclusion

Population	• ‘elite AND sport*’ • ‘high AND performance AND sport*’ • ‘perform* AND sport*’ • ‘elite AND athlete*’ • ‘athlete*’ • ‘elite AND sport AND policy’ • ‘*olympic*’ OR ‘paralympic*’ • ‘sport* AND *event*’ • ‘*mega-event*’ • ‘international* AND sport*’ • ‘multination*AND sport*’ • ‘international* AND event*’ • ‘multination* AND event*’ • ‘international* AND games*’ • ‘multination* AND games*’ • ‘multi-nation* AND games*’ • ‘sport* AND franchise*’ • ‘sport* AND team*’ • ‘sport* AND star*’ • ‘sport* AND celebrit*’ • ‘achievement*' • ‘sport* AND success*’ • ‘victor*’ • ‘medal*’ • ‘win*’
AND	
Exposure	• ‘society’ • ‘sportsworld’ • ‘inhabitant*’ • ‘population*’ • ‘consumer*’ • ‘tourist*’ • ‘attend*’ • ‘*fan*’ • ‘follow*’ • ‘communit*’ • ‘enthusiast*’ • ‘enthousiast*’ • ‘devot*’ • ‘particip*’ • ‘grassroot*’
AND	

Outcome	• (ethics' OR 'fair' 'play' OR 'norms' OR 'values' OR 'standards' OR 'morality) AND 'sport*' • (admission*' OR 'entry' 'ticket*' OR 'merchandis*' OR 'food' OR 'beverage*' AND ‘consumer*’ OR ‘tourist*’ OR ‘attend*’ OR ‘*fan*’ OR ‘follow*’)AND 'sport*' • (negative' OR 'bad' 'public' 'figures' OR 'role' 'models' OR 'role' 'model*') AND 'sport' • (family OR friends) AND impact AND negative • ('anger' OR 'rage' OR 'aggression' AND 'sport' • touris*' AND 'sport*' • (self-esteem' OR 'self-respect')AND 'sport*' • (sex' OR 'sexual') AND 'sport*' • (community' OR 'economic' OR 'entrepreneurship' OR 'industry) AND ('bad OR 'negative') AND 'sport*' • leadership' AND sport • (alcohol' OR 'doping' OR 'steroids) AND 'sport*' • (technological' OR 'knowledge) AND 'sport*' • ('differences' OR 'awareness') AND 'sport*' AND ('disab*' OR 'para*' or 'special') • ('boredom) AND 'sport*' • (brings' 'down' 'enthusiasm') OR 'passion • ('excitement' OR 'satisfaction) AND sport* • ('anxiety' OR 'fear' OR 'confusion') AND sport* • ('bullying' OR 'sledging' OR 'verbal' 'abuse' OR 'intimidat*) AND sport* • ('enthusiasm' OR 'energy' OR 'passion') AND sport* • ('safeness' OR 'trust' OR 'faith) AND sport* • ('exploitation' OR 'human rights') AND sport* • ('charity' OR 'fundraising') AND sport* • ('social' AND 'norms) AND sport* • ('school' OR scholar* OR academic*) AND elite sport* • 'communit*' AND 'host*' • 'peace' AND 'sport*' • communit* AND (negative OR bad) AND 'sport*' • (skill* OR competenc*) AND (difference OR 'gap') AND elite • ('venue*' OR 'facilit*' OR 'accommodat*' OR 'PPP') AND sport • ('social' 'inclusion' OR 'acceptanc*' 'OR' 'minorit* OR disadvant*) AND ('elite' OR 'sport' OR 'athletes') • 'public order' AND ('elite' OR 'sport') • 'crime' AND ('sport' OR 'elite') • volunteer* AND ('elite' Or 'sport*') • character' OR 'resilience' OR 'persistency' AND 'sport*' • ('addiction' OR 'fanaticism' OR 'obsession' OR " 'gambling) AND sport* • discourag* AND ('elite' OR 'sport*') • ('competitive' AND ('trait' OR 'character*')) AND ('elite' OR 'sport*') • ('discipline' OR 'self-control) AND ('elite' OR 'sport*') • 'disappoint*' AND ('elite' OR 'sport*') • smoking AND (‘venue' OR 'stadi*' OR 'attend*’ OR ‘*fan*’ OR ‘follow*’ OR ‘communit*’) AND ('sport*' OR 'elite') • (sleep OR 'sleep pattern*) AND (‘attend*’ OR ‘*fan*’ OR ‘follow*’ OR ‘communit*’)AND sport* • 'media' AND 'innovation' • 'social*' AND 'sport*' AND ('awareness' OR 'engagement')

- doping
- (eating OR eat) AND elite
- injur* AND elite
- ('social' AND 'skills') OR 'socializing') AND sport*
- ('marketing' AND 'city') AND sport*
- ('social' AND 'mobility) AND (sport* OR 'elite')
- (embarrass*' OR 'shameful*' OR 'incident*) AND (sport* OR 'elite')
- (employment' OR 'job') AND ('athlete*' OR 'elite')
- empowerment' AND ('elite' OR 'sport' OR 'consumption)
- hard work AND ('elite' OR 'sport')
- authorit* AND elite
- rebellion'
- 'sacrific*' AND ('elite' OR 'athlete*')
- ('striv* OR 'goal' OR 'aim*') AND ('achievements' OR 'success) AND elite
- (communit* AND harmon*) AND sport
- ('cultural*' AND (value OR apprec*)) AND (elite OR event OR sport)
- (‘health' OR 'fitness) AND 'elite'
- ('heroism' OR 'bravery' OR 'courage) AND 'sport*'
- 'legac*' AND (sport OR event) AND ('commun*' OR 'social*')
- 'engagement' AND 'sport*'
- ('physical' AND 'decline') AND ('age*' OR 'old*' OR 'post*' OR 'ex*') AND ('elite' OR 'athlete*' OR 'sport*')
- (feel* AND good*' AND 'factor*') OR 'enjoy*' OR 'fun*') AND (watch* OR 'attend*' OR 'fan*' OR 'touris*')
- 'ritual*' AND 'sport*'
- (outcast* OR 'belong*) AND 'sport*'
- ('leisure' AND 'time') AND ('sport*' OR 'fan' OR 'spectat*' OR attend*)
- ('famous' OR 'fame' OR 'recogniz*') AND sport*
- ('hate' OR 'unpopular*' OR 'critics*) AND sport*
- ('government*' OR 'public' AND ('spending OR 'fund*)) AND sport*
- (gross' AND 'domestic' AND 'product) AND sport*
- 'hooligan*' OR 'vandal*'
- hospitalit* AND sport*
- 'identit*' AND elite* AND sport*
- ('scien* AND 'innov*) AND sport*
- ('awareness' AND ('health' OR 'care')) AND sport*
- 'transport*' AND ('legac*' OR 'sport*' OR 'event' OR 'host*')
- ('national' AND 'identity) AND sport*
- 'pride' AND sport*
- 'nationalism' AND sport*
- 'social' AND ('elite' OR 'fan' OR 'attend*' OR 'host' OR 'event')
- 'wellbeing AND ('elite' OR 'fan' OR 'attend*' OR 'host' OR 'event')
- 'equity' AND ('sport' OR 'elite' OR 'fan' OR 'attend*' OR 'host' OR 'event')
- ('inequity' OR discrimin* OR 'inequalit*) AND ('sport' OR 'elite' OR 'fan' OR 'attend*' OR 'host' OR 'event')
- (econom*' OR 'commercial') AND ('sport' OR 'elite' OR 'communit*' OR 'host' OR 'event')
- (sedentary OR 'lifestyle') AND ('elite' OR 'communit*' OR 'fan' OR 'watching') AND sport
- ('disable*' OR 'para*' OR disabilit*) AND ('equit*' OR 'aware*') AND ('sport' AND 'elite')
- racial* AND 'sport'

- ('selfish*' OR 'ego') AND 'sport*'
- ('social' AND 'network*') AND 'sport*'
- ('honest*' OR 'integrit*) AND 'sport*'
- 'religion*' AND 'sport*'
- ('soci*' AND 'economic*') OR 'status') AND ('sport*' AND 'elite')
- ('brain' AND 'structure') OR ('cognitive' AND 'function') OR 'concussion*) AND ('sport*' AND 'elite')
- ('homophobia' OR 'gay' OR 'lesbian') AND 'sport*'
- 'war' AND 'sport*'
- ('dishonesty' OR 'corruption) AND 'sport*'
- ('mortality' OR 'suicide) AND sport*
- ('negative' OR 'bad') AND ('body' AND 'image') OR ('physique' AND 'anxiety) AND sport*
- 'infrastructure* AND 'sport*'
- ('prestige' OR 'reputation' OR 'honor') AND 'sport*'
- (invest* OR 'fund*') AND ('legitim*' OR 'explanation*' OR 'advoca*') AND 'sport*'
- ('consumption' OR 'consuming') AND 'sport*'
- ('healthcare' AND 'costs') AND 'sport*'
- ('job' AND ('absenteeism' OR 'productivity' OR 'performance' OR 'commitment')AND 'sport*'
- ('overtraining' OR 'overpressure') AND 'sport*'
- 'manufactur*' AND 'sport*'
- ('prejudice*' Or 'stereotyp*') AND 'sport*'
- 'media' AND 'sport*'
- ('mental' OR 'psychological') AND ('sport*' AND (athlete*' OR 'elite'))
- relationship* AND ('sport*' AND 'elite')
- ('responsibility' OR 'respect) AND ('sport*' AND 'elite')
- 'moral*' AND ('sport*' AND 'elite')
- 'patriot*' AND 'sport*'
- (‘personal' AND 'development') AND ('sport*' AND 'elite')
- ('perception*' OR 'critics' OR 'opinion') AND 'host*'
- 'emotion*' AND (('fan' OR attend* OR 'follower*') AND 'sport')
- ('addiction' OR 'fanaticism' OR 'obsession' OR '' 'gambling') AND 'sport'
- (‘collaboration' OR 'teamwork') AND 'sport'
- 'integration' AND 'sport'
- 'drug*' AND ('sport' AND ('elite' OR athlete))
- 'ethnic' AND ('sport' AND ('elite' OR athlete))
- 'gender' AND ('sport' AND ('elite' OR athlete))
- 'justice' AND ('sport' AND ('elite' OR athlete))
- ('inclusion' OR ('minority' AND 'groups)) AND ('sport' AND ('elite' OR athlete))
- ('relaxation' OR 'entertainment' OR 'liveliness) AND ('sport' AND ('elite' OR athlete))
- ('stress' OR 'depression') AND ('sport' AND ('elite'))
- (('motor' AND 'skills') OR 'dexterity' OR 'skillfulness' OR 'ability' OR 'prowess') AND ('sport' AND ('elite' OR athlete))
- ('physical' AND 'appearance' OR 'beauty' OR 'aesthetics’) AND ('sport' AND ('elite' OR athlete))
- ('citizen*' OR 'citizenship') AND ('sport' AND ('elite' OR athlete))
- 'reinvestment*' AND ('sport' OR 'elite' OR athlete))
- 'retail*' AND 'sport'
- ('retirement' OR 'career') AND ('sport' AND ('elite' OR 'athlete'))

	• 'stakeholders' AND ('sport' AND ('elite' OR 'athlete')) • ('environment' OR 'green' OR 'urban') AND ('sport' AND ('elite' OR 'event')) • (smug* OR 'trafficking') AND ('sport' AND ('elite' OR 'event')) • ((special' OR 'unique' AND 'brand') OR ('marketable' AND 'value)) AND (sport AND ('athlete' OR 'elite') • ('wage*' OR 'salar*') AND (sport AND ('athlete' OR 'elite') • ('diet*' OR 'nutrition*') AND 'elite' • ('educational' AND ('attainment' OR 'engagement' OR 'performance)) AND ('sport' OR 'elite') • ('self-efficacy' OR 'ambition' OR ('goal' AND 'setting)) AND ('sport' AND 'elite') • ('sport' OR 'participation') AND legac* • ('participation' AND 'sport') AND ('success' OR 'win' OR 'medal' OR 'victor') • ('participation' AND 'sport') AND ('elite' OR 'professional' AND ('equipment' 'and' 'facilities')) • (‘participation' AND 'sport') AND ('professional' AND 'structur*) • (('specific' OR 'group') AND 'polic*) AND ('participation' AND 'sport') • 'demonstration' AND ('participation' AND 'sport') • ('rule*' OR 'regulation*') AND (elite AND sport) • (television' AND ('rights OR 'payment*')) AND sport • ('debate' OR 'revolution) AND sport • ('volunteer*' AND ('skills' OR 'life')) AND sport • (illegal AND ticketing') OR ('black AND market') • (sexual AND (abuse OR harassment)) AND sport

[i] Elite sport, or high-performance sport, is sport at the highest level of competition, with elite athletes as the competitors

[ii]Society: The aggregate of people living together in a more or less ordered community; adjective: societal