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**Elite sport for social wellbeing:  
The concept of sustainable (slow) sport**

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**Elite sports in the service of social wellbeing:**

**The concept of sustainable (slow) sport**

PhD dissertation

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Motto:

*„For if a set of values is permanently struggling with dysfunctions in social practice, sooner or later the social erosion of the values will begin; they gradually lose their credit, their attractiveness weakens, they are no longer able to control human consciousness and behavior; but they are very capable of hindering the formation of new, workable values by becoming the graces of the formal ritual: the renewal of values.”*

*/Elemér Hankiss, 1983 - Társadalmi csapdák, Diagnózisok (Social Traps, Diagnoses)*

*Magvető Kiadó, Budapest, 248.o./*

# 1. Introduction

## 1.1 Foreword

Although I have never been a professional athlete, sports have always interested me. As a sports commentator, I was in constant contact with active or already retired professional athletes, I worked with them on various programs and broadcasts. Informal conversations with them were the first impulse that it would be worthwhile to look at this particular world from another perspective. To focus on sustainability and social aspects in the analysis, an important impetus was given by a book, Serge Latouche: Farewell to Growth (2011), which drew my attention to essential, hitherto unseen connections. My research was initiated by the recognition and contradiction I experienced in the lives of professional athletes. Namely, that although they became exemplary in their performance, many of them did not consider what they experienced to be complete, harmonious, and equally livable. I wonder why this duality developed, does it exist? How “fair” is it that those being role models for young people did not follow their path, not to do it all over again? What exactly can this mean? And what can be missing to make this path to be followed, repeated? From an individual, athlete’s perspective, I linked well-being (quality of life) to the dilemma that emerged as dissonance among professional athletes. At the system level (because I felt that the problem was not unique and not individual) I linked sustainability, which I used as an appropriate research framework to understand the contradiction and later resolve it. The problem affects several frontiers, as psychology and sociology also appear strongly alongside economics. These formed the basis of my doctoral research, which is explained in more detail on the following pages.

## 1.2 Abstract

The research started with the exploration of the individual experiences of professional athletes and the knowledge of the sustainability/well-being literature, which led me to compare the perceptions with the views of external observers (stakeholders). This became the questionnaire research, which already enabled system-wide analysis and concept-building. The PCA (principal component analysis) components (future, community, decommodification, performance) and IPA analysis have led to the key factors that seem essential for sustainable sport as a system and the fullest, most harmonious well-being of individual athletes and thus to achieve social well-being. Meanwhile, research on a sustainable vision has been carried out in the framework of athlete identity and backcasting research, but these already go beyond the scope of the doctoral dissertation.



### 1.3 Research frame

My summary based on three articles:

1. *Attila Szathmári: Building sustainability in sport: A clear offside or chance for a „slow” rebirth? (Vezetéstudomány / Budapest Management Review, XLVIII. ÉVF. 2017. 11. SZÁM/ ISSN 0133-0179. <https://doi.org/10.14267/VEZTUD.2017.11.04>).* The article aims to show the theoretical framework and connection points of sport and sustainability and to analyze its impact on well-being.
2. *Attila Szathmári & Tamás Kocsis: Who cares about Gladiators? An elite-sport-based concept of Sustainable Sport. (Sport in Society, <https://doi.org/10.1080/17430437.2020.1832470>).* This study aims to define the concept of sustainable sport to present the relationship between professional sport and sustainability.
3. *Attila Szathmári: ‘I wouldn't do anything differently ... although I don't let my child go in that direction’: Successful Hungarian Olympians’ understandings and experiences at the close of elite sport careers. (Vezetéstudomány / Budapest Management Review, 52(5), 68–78. <https://doi.org/10.14267/VEZTUD.2021.05.06>)* The purpose of the paper is to explore what aspects of identity building affect the identity and individual sustainability of professional athletes.

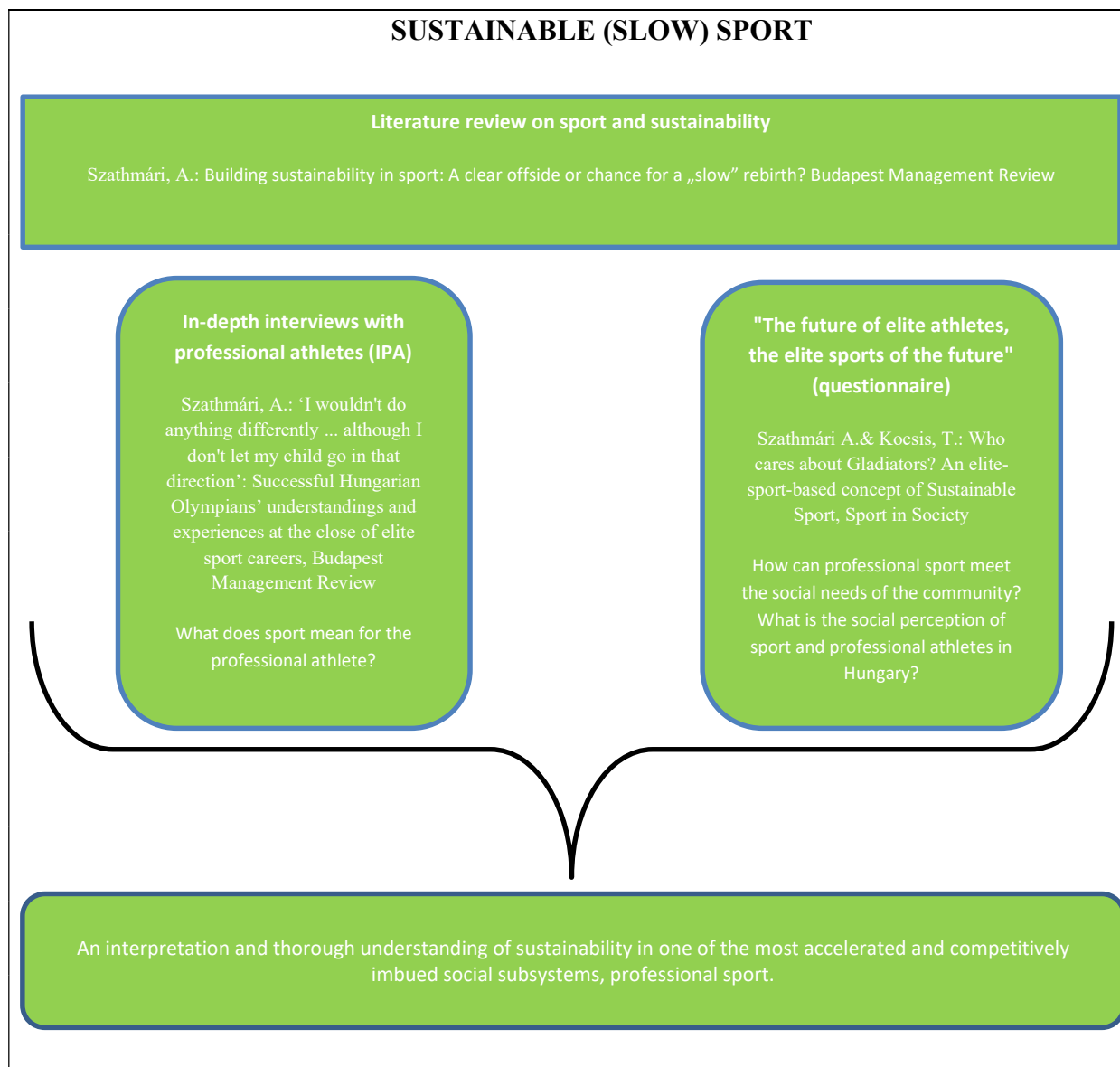


Figure 1. Relationship between research focuses and publications

My research focuses on the question: when can professional sport be considered sustainable as a social subsystem and under what conditions can it be put at the service of individual and social well-being? It focuses on the most-watched slice of the sport, professional sports. I examine this using sustainability, ‘slow’, and Degrowth as a theoretical framework through qualitative analysis of in-depth interviews and questionnaire data collection. The research aims to examine the relationship between sustainability and professional sport, to understand the existing problems and to explore the basic elements of sustainable sport. Furthermore, the creation and extension of the concept of “slow” sport to the wider environment, society and economic life, thus helping to develop a more sustainable model.

## 1.4 Theoretical background

### 1.4.1 Sustainability: response to resource depletion

Although the word: sustainability has been used only for a few decades, its content can be discovered already back in the 18th century at Malthus (1798). Malthus thought that if the human population continued to grow, food production would not be able to keep up with demand, so was arguing that the human population was at risk of outgrowing its carrying capacity. In 1864, the English economist William Stanley Jevons observed that technological improvements that increased the efficiency of coal use led to the growing consumption of coal in a wide range of industries. He proclaimed that, contrary to popular belief, technological progress could not be bank on to decrease fuel consumption (Jevons, 1864). The sustainability concept of the Brundtland report (1987) remained the most referred to:

*„Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Our Common Future, 1987: 27.).*

That is, do not jeopardize the well-being of children and grandchildren, applies not only to the natural environment. Two important definitions arise resource constraints and the need related the poverty, the natural environment and the issue of social equality. But the phrase raises several questions. First of all, do the emerging needs have to be met? Second, how do we know in a specific moment what will be a legitimate need for the future generation? In any case, Littig and Giessler (2005) emphasized the need to change human lifestyles to preserve the ecological system and the sustainability of resources. The proposed equal treatment of the three pillars (society, economy, and environment) is based on the conclusion that human needs cannot be sufficiently met only by providing an ecologically stable and healthy environment, but that – if a society is indeed committed to sustainability – equally legitimate social and cultural needs ought to be taken care of as well. Sustainable economic, social and cultural conditions and values are deemed to be resources that should also be preserved for future generations.

So the definition of sustainability has enlarged to three pillars where in addition to the environmental aspect, the economic and social pillar has an equally important role. Moreover, even beyond this, Roth and Valentinov (2020) discuss social subsystems that interact with each other, such as religion, health, economy, science, art, media, politics, law, education and sports, as well as their unique environment and unique sustainability.

According to Jones, Selby and Sterling (2010) the conditions for both humankind and environment of mutual prosperity, security and the chance of survival can co-exist and have to be met. Much more generally, Senge (2008) suggested considering every boundary, which will contribute to a healthy community of the future. McMichael, Butler and Folke (2003) concluded to maximize the chances for the environment, and the social conditions enable to help to reach safety, well-being, and health. Ehrenfeld (1978), formerly widened those with biodiversity, human rights, equality, openness, and respect dimensions.

On a rhetorical level, in everyday language, sustainability has become a buzzword on economic, environmental and social issues, but in scientific language, a serious discourse surrounds what exactly it means. Although discussing this goes beyond the scope of my research, a specific element of the topic requires a more detailed explanation. The difference between weak and strong interpretations of sustainability (Málovics & Bajmócy, 2009) is decisive in the interpretation of some elements of the research. Separation first appeared in Pearce's (1989) work and then, among others, Neumeyer (1999) analyzed the difference between weak and strong sustainability in more detail:

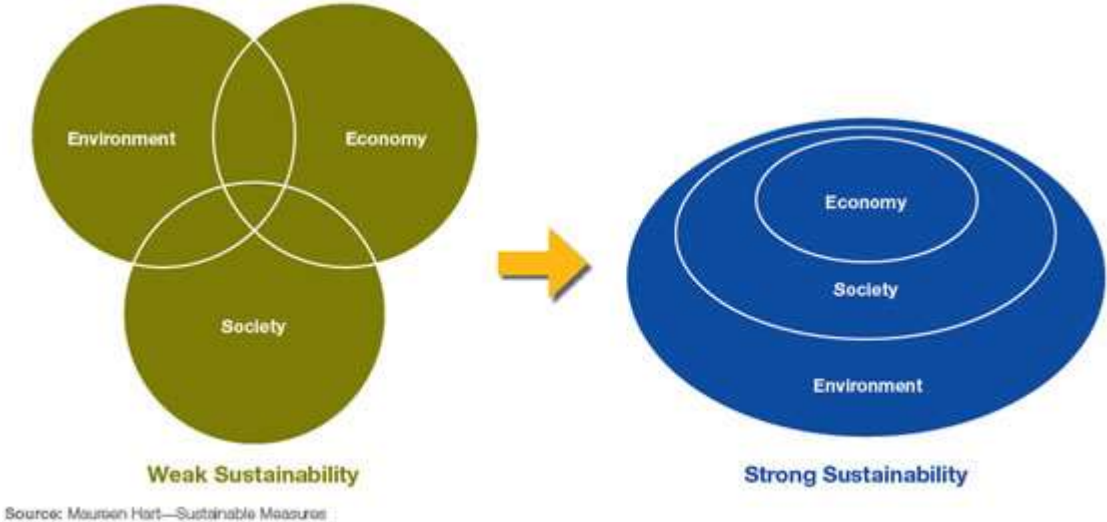


Figure 2. Weak and strong sustainability

Researchers typically see the difference between weak and strong sustainability in terms of natural and artificial capital. According to the theory of weak sustainability, natural and human-made capital are fundamentally substitutable. Thus, to meet the criterion of sustainability, it is sufficient that the combined value of the two types of capital does not decrease, ie. the destruction of a natural resource creates human-made capital of at least the same value.

According to the theory of strong sustainability, natural capital is not, or only to a very small extent, substitutable for human-made capital, and therefore constitutes an absolute external sustainability constraint, a minimum level of which must be maintained for the well-being of future generations. This also means that in the case of weak sustainability, economic growth is acceptable, according to a strong interpretation, sustainability can be interpreted with a steady-state (Daly, 1977) or degrowth-oriented (Latouche, 2011) economy. As a result, in ecological economics, the monetary valuation of nature and the efficiency and optimum principle of decisions are questioned - the optimization of well-being and efficient allocation are not even primary goals. Norton et al. (1998) rank them only in third place behind ecological sustainability and equitable (intergenerational) distribution. But if human-made and natural capital are complementary rather than substitutable, as ecological economists claim, then the expansion of the economic subsystem is even more limited. There is no point in increasing human-made capital at the expense of the remaining natural capital once the two types of capital are complementary. An essential element is social justice, based on ensuring equal access to opportunities and sharing the social burden; the pursuit of continuous improvement in the quality of life, which includes health - full physical, mental and social well-being - and in this connection welfare, healthy environmental conditions, democratic rights, security, education for all, etc.

Mapping the relationship between the economy and society, Polányi (2001/1944) described the process as a ‘great transformation’ by which the market scheme became dominant among the behavioral principles that organized society, the social system transformed into a social system regulated by market economy laws. In this system, the social responsibility of global companies is to contribute by self-restraint to the creation of a social safety net that retains the workforce in its human entity, ie. its human characteristics as a whole, it must contribute to the prevention of the disintegration of nature and accept the social and community orientation of the monetary system (Szalay, 2008). Responsible thinking thus goes beyond the mere production of income in the interests of shareholders but also involves the reconciliation of environmental and social benefits in addition to economic ones (Freeman, 1984). This has led to the issue of sustainability, which can be attributed to a strong or weak indicator (Daly, 1977; Kerekes et al., 2018); and social futuring (Szántó, 2018), where control of human needs can be internal or external (Kocsis, 2018; Heikkurinen et al., 2016).

#### 1.4.2 The dualism of professional sports and leisure sports

In the second half of the 20th century, with the intensification of globalization, the rise of television, the increase of leisure time, and with the change of consumption habits, sport became

more and more a business (András et al., 2019). The processes taking place in contemporary society, including the world of sport, are determined by globalization as a cultural and economic phenomenon, capitalism as an economic system and as the “logic of how things work”, the info-communication revolution and apostrophized consumer society, the rather accelerated way of living, and in this context, the pre-existing social functions of sport also seem to be changing (Dóczy, 2011). At the same time, crisis phenomena arising from the above constellation, such as global climate change and the consequent environmental disasters, the Covid-19 pandemic, and the continuing increase in socio-economic inequalities, present the sustainability dilemma as an increasingly pressing issue.

While official sport definition highlights the physical and mental factors: "Sport means all forms of physical activity which, through casual or organized participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels." (European Sports Charter, 1997).

From a research point of view, it was imperative that the narrow-broad framework further break down, and ask the question: “what is the subject of exchange here?” Along with this issue, Dénes and Misovitz (1994) and Nagy (1995) sharply separated professional sport (where entertainment, the other movement became the subject of exchange) from the recreational sport. An enormous range of synonyms (professional, elite, high-performance) used to show the main differences, as it is the former, where the athletes get paid and pursue it as a profession. The latter is done in recreational time, for the sake of exercise, or health prevention. From a consumer point of view, we can identify an active-passive boundary (Table 1).

|                        | <b>ELITE SPORT</b>  | <b>LEISURE SPORT</b>  |
|------------------------|---|---|
| <b>LABELS</b>          | <i>PROFESSIONAL SPORT</i>   | <i>AMATEUR SPORT</i>  |
|                        | <i>WESTERN LOGIC</i>  | <i>EASTERN LOGIC</i>  |
|                        | <i>HEROIC ORIENTATION</i>   | <i>AESTHETIC ORIENTATION</i>  |
|                        | <i>POWER &amp; PERFORMANCE</i>  | <i>PLEASURE &amp; PARTICIPATION</i>   |
| <b>ACTIVITY</b>        | Profession<br>Competitive   | Hobby<br>Non-competitive  |
| <b>GOAL</b>            | Income<br>Progress<br>Performance   | Recreation<br>Health<br>Community   |
| <b>ATHLETE'S ROLE</b>  | Workforce<br>Competitor   | Consumer<br>Participant   |
| <b>EXCHANGE</b>        | Attention<br>Attraction   | Doing sport<br>Equipment  |
| <b>CHARACTERISTICS</b> | Training<br>Selection<br>Exclusive opposites<br>Peak form<br><b>Accelerated</b> | Cooperation<br>Involvement<br>Complementary opposites<br>Fun<br><b>Slow</b> |

Table 1. Elite sport vs. leisure sport (Source: own compilation based on: Dénes & Misovitz (1994); Nagy (1995); Horne et al. (2005); Coakley (1994, 2016); Pang & Macdonald (2016); Kocsis & Szathmári (2020)).

#### 1.4.3 Sustainability, athlete identity and its connection to elite sport

One of the cornerstones of sustainability (in addition to economic and environmental) is social sustainability, whose keywords are quality of life, education, equality, community development, etc. These are the values that are important now and for future generations. Its key philosophical element is “slow”, of strategic importance for both the environment and well-being. It is closely related to the ideology of Degrowth. In our accelerated world, “In the Great Acceleration” (Steffen et al., 2015), Degrowth seeks the conditions for non-growth oriented existence by questioning existing economic logic. It simplifies the task if we find a subsystem that is of public interest, its internal logic is easier to grasp, and its language is more intelligible. Such a subsystem is sports, including professional sports, which are held with great interest, the successes are given serious publicity, and its operational logic can correspond to the contexts of growth-oriented economic logic, in many cases it shows them more clearly.

Surprisingly, few scholars have attempted to bring ‘sustainability language’ into the discussion about high-performance professional sport (Szathmári, 2017). Scholarship exists about how sporting activities can contribute to peace, cultural diversity and tolerance (Barker et al., 2011; Dagkas, Benn, and Jawad, 2011), social justice, social inclusion and wellbeing.

In most general texts on sustainable development, the social needs of present and future generations are discussed regarding equity, ethics, and rights. Equity is regarded as denoting fairness – social justice and equal access to opportunities – generate a range of positive social effects including reinforcing collective identities; uniting people; improving self-esteem; increasing civic pride; raising awareness of disability; inspiring children; providing an experience of work; encouraging volunteering, increasing participation in sport; and promoting well-being/healthy living. Loland (2006) proclaims the importance of people-centered perspectives in relation to the sustainability of Olympic sports, and thus professional sports. He points out that it is humanity's responsibility to create unity, to recognize the complexity and diversity of the ecosystem. From this perspective, the question arises as to how professional sport, through sport, affects the relationship between people and their wider environment. Lawson (2005) found that sport should not see as a homogenous entity. Rather as two underlying philosophy (high performance and recreational sport) which are radically different from each other. Therefore sees the relevance of sustainability is slight about the professional sport in which your keywords are the training, selection, peak performance and load, while fully compatible with the values of recreational sport, often identified with cooperation, participation, relish, and delight. Recreational sport can create a social network, develop community identity, improve human health, can have a real effect on the well-being and human capital.

Due to its system logic and risky consequences, some sports scientists have turned to identity-related concepts to challenge this dualism and elaborate whether and how elite sport might be individually sustainable (Dohlsten, Barker-Ruchti & Lindgren, 2020). Sustainability can mean various things, and individuals may weigh different aspects of the latter concept in slightly different ways (Király et al., 2013). Researchers have claimed that it is rather complex and difficult for sport to meet the requirements of sustainability, as this would involve athletes, coaches, associations, organizers of sporting events, decision-makers, representatives of the economic ecosystem, and sports-related social organizations, too – insofar as sustainability is based on long-term thinking and planning, and a rejection of short-term alternatives to achieve long-term goals (Dingle & Mallen, 2020). This means, on the one hand, promoting the ecological aspects of sustainability - making sport green - and, on the other hand, promoting economic sustainability, long-term return and predictability (Preuss, 2019).

Researchers suggest that sustainability represents “a condition or set of conditions whereby human and natural systems can continue indefinitely in a state of mutual well-being, security, and survival” (Jones, Selby & Sterling, 2010, p. 19). While security and survival have become



increasingly important topics for humankind, surprisingly few researchers have so far tried to build a concept of individual sustainability around elite sports. Lindsey (2008) defines individual sustainability as a longer-term shift in personal identity, ability, and/or attitude through development about participation in sports.

Thus, in relation to the early burnout of athletes, Coakley (1992) examined whether we can speak of a social phenomenon or an individual problem. He concluded that there is a fault in social organizations and their transformation is inevitable. While researchers suggest that the performance needs and resources of professional sports limit the individual sustainability opportunities of professional athletes, they also indicate that a short career does not preclude the sustainability of longer-term careers in other areas. (Vveinhardt, Fominiene & Andriukaitiene, 2019; Szathmári, 2021).

An increasing number of jobs/careers are becoming unsustainable due to high employer- and contextual demands, occupational stress, burnout, and lack of work-life balance (Richardson & McKenna, 2020). The physical, psychological, and emotional demands of a career in elite sport often end in burnout and chronic levels of stress and injury that lead to the end of athletes' careers (Thelwell, Weston & Greenless, 2007). Richardson and McKenna (2020) argue that, although the demand for a high level of performance may limit individual sustainability in elite sport, this should not be inherently problematic and maybe something that can be "managed away." However, doing so may negatively impact athletes' motivation to participate, and hence subsequent performance. Concerning mental health, Fletcher and Sarkar (2012) examined the stress tolerance of Olympic champions, and the importance of individual well-being through athlete's career explored by Lundqvist (2011). By focusing on the role of coaches in sustainability, Annerstedt and Lindgren (2014) found care as a keyword. The difficulties involved in ending a professional career and the relationship between employment and human capital were examined by Ling and Hong (2014).

In my research, I examine individual sustainability with a focus on athletes as human beings and their personal needs. Lawson (2005) concluded that the sustainability of professional sport is fragile due to its inherent logic. This fragility is closely related to the identity formation of athletes. Athletes who can transform and preserve their identity before the end of their careers are better able to cope with the loss than those who are strongly committed to their athlete identity until the end of their careers, or even later.

Athletes' identities incorporate the cognitive, affective, behavioral, and social aspects associated with their roles (Brewer, Van Raalte & Linder, 1993). "Like all role identities, an athlete's identity is developed through the process of constructing and interpreting meanings within various social interactions. In this sense, athletes use socially constructed norms, values and beliefs associated with the sporting role to help understand the world around them" (Ryan, 2018, p. 1). Thus, understanding the identity component of athletes is a vital task when investigating the experiences of athletes, and research into identity concerning individual sustainability in elite sport may offer insight into this specific parameter (Cosh, LeCouteur, Crabb & Kettler, 2013).

While an individual's identity can consist of various dimensions, one of these will probably become a dominant lens through which the others are viewed (Lally, 2007). Ideas about identity formation can thus contribute to understanding how sustainable elite sport can be expanded. Thus, this paper aims to reveal athletes' needs and concerns regarding sustainable elite sport. Specifically, we aim to answer the following research question: What aspects of identity construction influence the identities and individual sustainability of elite athletes? We try to elaborate how the sample athletes make sense of their elite sports careers, including what they see as important factors to their success, and what they see as problems. In this sense, we seek to understand individual sustainability in sports as the product of the correspondence between the demands of an elite sport system and the individual athlete's personal needs and potential (Schubring & Thiel, 2014).

#### 1.4.4 Strong sustainability is a systemic study of professional sports and recreational sports in the context of nature, society and the economy.

For a deeper understanding, it is worth integrating sustainability into a system, with professional and leisure sports as social subsystems. The economic logic of profit maximization (efficiency and competitiveness with quantitative measurement, financial metrics) is a feature of the economic system. But if beyond this logic, other socio-environmental considerations prevail, then we can conclude that the economy has not "absorbed" society and the environment and that strong sustainability prevails.<sup>1</sup>

This dualism has existed since elite sports became a business – a fairly recent phenomenon compared to the development of the rest of the economy since sports professionalism and its commercialization only started within the last four decades (András, 2003; Dénes & Misovitz,

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<sup>1</sup> See more regarding the Degrowth concept (Kallis, Kerschner & Martinez-Alier, 2012; Liegey et al., 2013; Harangozó, Csutora & Kocsis, 2018).

1994). The logic of elite sport is characteristic of the capitalist society that created it. Elite sport is the product of a growth-based society, with its attendant subsystem and ideological support. Organized according to the logic of productivity, efficiency, evaluation, comparison, hierarchy, etc., elite sport reflects the conditions of society and makes its pitfalls even more visible (Liegey, Madelaine, Ondet & Veillot, 2013).

The spirit of Degrowth emphasizes environmental and social sustainability and social functioning based on peaceful and convivial, i.e. meaningful social coexistence, and transcends the fundamentals behind the economic mechanisms based on current productivism, such as the human image of Homo oeconomicus; labor society; the possibility and necessity of unlimited growth; or the ideal of full employment. These fundamentals, according to the trend, are “false beliefs etched into our world of thought,” and call attention to the fact that questioning them can pave the way for a discourse that can lead us to a more sustainable and just society (Köves, 2017).

The main goal of the research is to understand whether strong sustainability can be applied in the field of professional sports as well, to formally examine the experiences of Hungarian professional athletes, how professional sports are related to the components of athlete identity and individual sustainability. The research results can contribute to a deeper understanding of the topic, to the recognition of the importance of strong sustainability not only in the field of sport but also in the broader context of the environment and the economy.

## 2. Methodology

The three main parts of the research are the creation of theoretical background, an in-depth interview with professional athletes (qualitative), and the collection of a large number of questionnaires (quantitative) exploring the current state of sport, not only in time but also for the main stakeholders. There is also a logical link between these that in-depth interviews helped to define the questionnaire statements of the large sample of quantitative research.

### 2.1 Qualitative research

IPA is a qualitative research method that is increasingly used, primarily in psychology. The basics of IPA are related to phenomenology and hermeneutics, which emphasize that individuals' experiences can only be interpreted in context. The IPA-based approach allows the researcher to view a specific experience from an “insider perspective,” treating the researcher as an expert. The method seeks to identify and understand the experience as much as possible, and to understand how the person involved in the study interpreted it (Kassai, Pintér & Rác, 2017). The aim of IPA research is thus to explore personal, lived experiences with phenomena,

such as – in our case – athletes’ career experiences (Smith, 2011). Qualitative research can help with understanding customers’ / consumers’ experiences and evaluations of a particular service (Fett, Bruns & Lischka-Wittmann, 2009). IPA is, therefore, an interpretative, hermeneutical method that can appear at several levels in the research process.

The research question is always open, is focused on exploration (no explanation), on the process (not the result), and aims at reporting (not identifying causes or consequences). The research question should also involve a special context (not, for example, a comparison of contexts). At the beginning of the research, we formulated a two-level research question (a first-level research question was followed by a second-level research question that could be theoretically grounded) (Somogyi et al., 2018).

The next step was the creation of emerging themes (Pietkiewicz & Smith, 2014) by exploring all the interviews from a different perspective to that of the participants. In this, more emphasis was placed on the researcher's organizing and interpretative role. While creating a “new body” of outcomes, the themes continuously develop. A topic may become an emerging issue when it arises in at least half of the interviews (Smith, Flowers & Larkin, 2009), and these topics should be written down in the transcript. In implementing this method, the researcher can incorporate psychological constructs into the process of interpretation.

We worked with targeted sampling during the IPA research. Sample members provide access to study a particular phenomenon that represent a “perspective” rather than a population. We implemented a semi-structured interview with each participant. Semi-structured interviews were used because the method permits the researcher’s questions to guide the interview process while simultaneously allowing topics identified by the participants to be elaborated upon via probing (Rubin & Rubin, 2012). Following the recommendations of Smith et al. (2009), a state of homogeneity can be identified. Regarding the experiences of athletes, homogeneity should be present in the sense of the athlete’s basic experiences and transitions, and the time spent on professional sporting activities. Accordingly, the main characteristics of the sample members’ sporting experiences were similar in terms of individual/team sports, popularity, domestic/international success, Olympic embeddedness, supporting system, and in how much time they had been inactive at the time of the interview. Based on their own experiences, Larkin, Eatough and Osborn (2011) suggest using a sample of three to six people. This is suitable for describing similarities and differences between individual cases. Sample selection was based on Miles and Hubermann’s (1994) classification that employs intensity-based criteria and comparable sampling techniques. The essence of the former is investigating information-rich

cases, which describe cases intensively but not extremely. Respectively, I work with subjects who have the same relevant characteristics.

| Participant | Gender | Age | Sport        | Best international results   | Best domestic result |
|-------------|--------|-----|--------------|------------------------------|----------------------|
| A1          | Male   | 35  | Athletics    | European championship Top 25 | national champion    |
| A2          | Male   | 34  | Table tennis | International youth champion | youth champion       |
| A3          | Female | 31  | Swimming     | Olympics Top 3               | national champion    |
| A4          | Female | 39  | Athletics    | Olympics Top 25              | national champion    |
| A5          | Male   | 44  | Athletics    | Olympics Top 15              | national champion    |

Table 2. Basic data of the interviewees

During the interview lead-up process, we identified five professional athletes whose selection process we considered homogeneous according to the criteria detailed below. One of the criteria was the sport itself – namely, interviews were restricted to athletes who had competed in individual sports (e.g. swimming or athletics). This was necessary because we hypothesized that those in team sports would experience the effects of success/failure, expectations, and other mental factors differently, more intensively, and managing the effects of group dynamics would have complicated the research process, so we filtered out this effect. An important criterion is the role of success: in terms of domestic success, those who reach the Hungarian championship title, internationally registered, turned up at the Olympics, placed there, placed a medal and thus serious financial support, became the participants of the homogeneous sample. Our goal is to examine athletes who can be considered successful in a purely outcome-based, measurable approach. Finally, the role of time is also an important criterion, ending with a professional career that has been sporting for more than a decade, giving them the right distance and insight into this stage of their lives. They have not been cut off from sport, they are still considered to be within the “system” in some form.

Contact was based on pre-established relationships. This ensured that all the above-mentioned “intensity criteria” were met. Interviews were documented in a friendly environment known to the athletes. This prior contact ensured an open and frank atmosphere and increased the chance that subjects could boldly express themselves. A semi-structured interview process was applied that incorporated the results of the former questionnaire survey. Inquiring about the phenomenon we wanted to investigate (including experiences of injury, failure, or success) during the interviews allowed the identity of the interviewees to be evaluated in the context of the given experience. Interviews were documented in 2015, each lasting between 60 and 90 minutes. Before these, participants were oriented about the object of the research and gave their informed consent. Recordings were made which were later destroyed. Documentation was transcribed and major nuncupative elements were labelled (such as chuckling and meaningful silences) and noted down.

## 2.2 Quantitative research

Based on the literature, our own experience, and the above qualitative research (semi-structured interviews), we prepared a questionnaire consisting of 23 statements, using a 1-5 grade Likert scale. This was the starting point for the quantitative research questionnaires. (Table 3)

| <b>LABEL</b>           | <b>STATEMENT</b>  |
|------------------------|---|
| <b>LESS_UNEQUAL</b>    | Elite sport plays an important role in reducing social inequality.  |
| <b>CAREER</b>          | Elite sport is one of the greatest career opportunities for young people.                                     |
| <b>RESPECT</b>         | Top athletes receive social respect through sport.  |
| <b>LESS_CONFLICT</b>   | Elite sport can help to reduce conflict between people.   |
| <b>PROUD</b>           | Hungarians can be proud of their achievements in sports.  |
| <b>NAT_HAPPINESS</b>   | Achievements in sport contribute to the nation's happiness and wellbeing.                                     |
| <b>SPORTMANSHIP</b>    | In elite sport, the principle of athleticism prevails within and outside the field.                           |
| <b>USEFUL</b>          | Doing elite sport is useful.  |
| <b>LAB</b>             | Things are going to be done in the laboratory [medical interventions/doping] rather than on the sports field. |
| <b>MEDIA</b>           | The media is more harmful to the elite sport than supportive of it.   |
| <b>ENTERTAINMENT</b>   | The role of elite sport is entertainment.   |
| <b>MONEY</b>           | The role of money in elite sports has increased too much.   |
| <b>BET</b>             | It is good for elite sports that more and more types of betting are available.                                |
| <b>DOPING_DANGER</b>   | Prohibited performance enhancers (doping) endanger the fundamental values of elite sport.                     |
| <b>BURNOUT</b>         | Pressure to perform due to the limited length of athletes' careers leads to burnout.                          |
| <b>EVERYEFF_REV</b>    | It is good that elite athletes make every effort to achieve results. (Reverse coded!)                         |
| <b>HEALTH</b>          | Sports help keep elite athletes healthy.  |
| <b>LIFELONGSUCCESS</b> | An elite athlete can base their life around their sporting activity.  |
| <b>GOODSITUATION</b>   | The situation of Hungarian elite athletes is good.  |
| <b>HEALTHDEMANDING</b> | Sport places demands on the health of elite athletes.   |
| <b>GOODCOMPETITION</b> | Pressure to perform also brings out the best in elite athletes over the long term.                            |
| <b>IDOL</b>            | Elite athletes are role models for young people.  |
| <b>MYCHILD</b>         | I would like my child to be an elite athlete sometimes.   |

Table 3. The elite-sport-based Sustainable Sport questionnaire emerged from interviews with Hungarian elite athletes.

A total of 388 respondents completed the questionnaires, which were implemented in two waves. The first wave was organized in January–February 2016 through a sports-related social media page (<https://eurosport.hosszabbitas.hu>) and the second through the first author's personal social media site (reference later) (N=216; later referred to as the 'mixed sample'). The second wave was implemented later (April–May 2016) at the University. Bachelor students who had chosen to study a basic, elective Environmental Economics course (N=150; later referred to as the 'student sample') were asked to participate in the research. The sample is slightly over-represented by men (52.8%), with a roughly similar proportion of those with a professional sports background (52.6%) and those without (47.4%). Almost half of the respondents had the highest educational attainment was graduation (46.9%), the main reason for this being that part of the questionnaire was conducted among university students. Almost three-quarters of the respondents grew up in cities (71.5%).

The two samples are far from representative of Hungarian society, but the research was designed as a pilot project for revealing the structure of sports-related problems that prevail in society, thus we do not seek to extrapolate the findings to the whole of Hungarian society.

## 3. Results

### 3.1 Result of qualitative research

#### 3.1.1 First-level interpretation: the most important elements of professional sport

My basic research question is, “What does sport mean to the athlete?”. In this system of relationships, what sport means to the participant, the athlete living in it defines the core values of sport. The question can be integrated with the research as a whole, can records of sustainability, commitment to defeating an opponent, in other words, desire for more, run into constraints similar to the scarcity of resources in our natural environment? There, the excessive use of resources is the main constraint, even if efficiency improves due to continuous innovation (rebound effect, population growth). If we equate humankind with the natural environment in sport and examine its limits, we must look for what is desirable directly to human. What can be shown to be efficiency gains and results in the short term is not supportive of human well-being in the long run? In addition to its physical and mental factors, it also includes the study of the human environment. The question is, has the sport, the professional athlete, reached or exceeded the point where this balance was upset? Is there still room for improvement in athlete efficiency without longer-term harm. What can be done to restore the balance between short-term and long-term interests?

The next step in the analysis is to define emerging themes (Table 4). During the coding of the first interview, the emotional escalation became emphasized as the athlete talked about his coach, parents, age group, using several motives (desire, love, protective cover) that suggest an analogy of a relationship. Of these stakeholders, these three groups appeared in all interviews and are therefore listed as separate topics. Attitudes towards training and competition were also decisive. Just as the opportunity to get to know the world was present in all interviews, so was the impact of sport on health and the issue of career closure.

|   |   |   |
|---|---|---|
| <b>PARENTS' ROLE</b><br>you are your own person<br>there is no fight<br>family pressure --> study   | <b>DESIRE</b><br>sport as love<br>coaching for love --> crazy<br>easier way vs. learning                              | <b>MENTAL/PHYSICAL HEALTH</b><br>always pain<br>coach physical --> psychologist mental<br>enormous load --> hit back  |
| <b>TRAINING</b><br>monotonous, hideous<br>playfulness <--> get results<br>no training --> still success   | <b>COACHES' ROLE</b><br>luck, responsibility<br>no private life - after own's head<br>no killing-noticed-was built up | <b>ABROAD</b><br>horizon<br>scholarships<br>money, better facilities  |
| <b>COMPETITION</b><br>injustice<br>happiness<br>eternal pain  | <b>VISION</b><br>sport as protective cover<br>closed world: grime --> cleaner, easier<br>black hole, vacuum           | <b>AGE GROUP RELATION</b><br>trust only yourself <--> society<br>embarassing not to study<br>marriage, children later |
| <b>IDENTITY: WHO HAVE I BECOME?</b><br>never give up<br>tomorrow will be better<br>start at the bottom<br>role model, positive personality traits |   |   |

Table 4. Exploratory themes that emerged during the coding process

Thereafter, we sought to identify the connections (such as chronological links) between the emerging themes and those overarching topics that could cover several subtopics. By using quotes from the interview transcripts and trying to reveal the patterns and groups of topics among the interviews, further interpretation of unfolding themes – called “master themes” – can be developed (Smith, Flowers & Larkin, 2009). During the analysis, the researcher interprets how the interviewee has interpreted their experience; this dual interpretation is a process of “double interpretation” wherein the second, scientifically and systematically performed interpretative work of the researcher can be considered a part of the reflective phenomenological attitude of IPA – as opposed to interviewees “naturally adjusted” pre-reflective observations, using Husserl's expressions (Smith et al., 2009).

The indicative identity of athletes was constructed within a performance-based narrative plot. By exploring the identity-construction aspects of elite athletes in the re-readings and rearrangements of the text, stories emerged around three unfolding themes: the (a) “central role of coaching” during the careers of elite athletes; elite sport reflected as a (b) “protective cover”; and (c) “social connectedness” related to identity development.



| Role of coaching  |   | Protective cover   |   | Social connectedness  |   |
|---|---|--|---|---|---|
| Gains   | Lack of..   | Age-group  | Problems  | Cognitive dissonance  | Child-like values   |
| Appreciation, relationship, coach, emotions, love   | Concept, working system, lifelong program, human focus, appreciation, long-term perspective           | Privileges, comparison, exit, integration, otherness   | Mentality, health, age group, human relationships, transition   | Belief, values  | Motif, playfulness  |
| <i>It was the expectation of the [trainers at the] swimming pool that educational studies would continue.</i> | <i>...these days people - who do something terrible, worthless - gets into the focus of society.'</i> | <i>'Those of my age group got married earlier and had babies earlier. There is no healthy golden mean, only extremes.'</i>                                       | <i>Ask anyone at the top! Sport is not healthy anymore.'</i>  | <i>'I wouldn't do anything differently ... although I won't let my child go in that direction.'</i>   | <i>'[Participating in the] Sydney [Olympics] was like taking a kid to the amusement park.'</i>                          |
| <i>...results must be produced at all cost for coaches so that they can prove their existence.'</i>           | <i>To offer alternatives and not to let go of one's hands when they quit.'</i>                        | <i>Everyone loves athletes. Especially if you are successful. In life, you can never normally do something that everyone unconditionally accepts and loves.'</i> | <i>I can understand the people who - it will sound rude - jump out the window to finish their participation in athletics or any sport.'</i> | <i>After retirement, it was complicated for me, and it was a severe problem that time was running out of my hands, days and hours, deadlines of all kinds.'</i> | <i>Little ones should be playful. This is the biggest mistake in relation to performance constraints.'</i>              |
| <i>...he did not burn me out in the drive to be successful; I was systematically built up to be good.'</i>    | <i>'Only the very crazy stay there for that minimal amount of money, doing it with love.'</i>         | <i>'I went around the world because of my running and jumping.'</i>  | <i>It was a space: a vacuum and I felt that I couldn't find my place in my age group.'</i>  | <i>I think the most serious problem is that an athlete counts as long as he/she is active.'</i>   | <i>...hold hands for a few years and be by her side as she becomes independent and switches over to everyday life.'</i> |

Table 5. primary and secondary themes identified and unfolded during the IPA process.

(a) The “**central role of coaching.**” Closely associated with other emerging themes (parents, training, competition, and desire). The role of coaches (as part of a supporting system) is remarkable in terms of the original discovery of the athletes (“seeing something in me”), managing them properly (“not killing me”) and long-term planning (“built-up”). We identified motifs associated with long-term planning (athlete-coach-sport), athletes who face “burn-out,” and other factors. “I was lucky with my coach as he did not burn me out in the drive to be successful; I was systematically built up to be good.” The coaches’ role emerged as vital in shaping the athlete’s identity and creating the chance for an individually harmonious career: “I think the most serious problem is that an athlete counts as long as they are active. While an

athlete is in this phase of their life, they should be prepared for the next period.” A lack of the elements of long-term planning, a human-centered approach, and a life-long program may be components of an elite sport system, and a missing part of the individual athlete’s personal needs and have potentially negative effects on individual sustainability.

(b) The “**protective cover**” The role of contradictions, such as the comparison of the internal/external world and active/formerly active athletes, is essential in identity construction. “Everyone loves athletes. Especially if you are successful. In life, you can never normally do something that everyone unconditionally accepts and loves.” An individual’s identity can consist of various dimensions, while the existence of a “protective cover” is identified as a dominant lens through which “the outside world” is viewed. Sport is like a small world surrounded by a protective sheath that separates and protects athletes yet making it extremely difficult to quit. A “closed world” that “itself is dirty but still simpler, cleaner (!) and not as infected as the outside world.” Age as a sub-theme also forms the basis of continuous comparison to social status, becoming a substantial part of subjective social self-image. Constant comparison was also related to raising awareness about what sport (“worldview” sub-theme) could give athletes in return. A “black hole” or “vacuum” may arise after emerging from under the protective cover of a life in sports. Athletes who can restructure and preserve their identities before finishing their athletic careers might be better able to cope with such losses. Accordingly, restructuring and preserving their identities before finishing their athletic careers might help them to cope with the experience of loss. Here, security is considered key in terms of to what extent it is available to athletes. Personal security comes under threat during transition periods (starting and finishing a career, turning professional etc.) so a systematic approach that can protect oneself becomes essential.

(c) The third main theme is the issue of **social connectedness** and athlete identity. All this can be grasped with the child motif, which can be found in all three perspectives (athlete, parent, coach). Values are important, playfulness as a coach, but the dilemma as a parent is whether the child chooses the same path, which is perhaps the strongest indication that the desired balance between short- and long-term interests is disintegrating.

### 3.2 Results of the quantitative research

Despite the different characteristics of the two quantitative subsamples described above, we found no significant differences ( $p > 0.95$ ) in the means of answers to our elite-sport-based Sustainable Sport questionnaire (Table 2). Thus, we regard the whole sample as the uniform for further analysis. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy (0.704)

and Bartlett's test of sphericity ( $\chi^2 = 931.219$ ;  $p = .000$ ) indicated that there is room for dimension reduction in this sample. Thus, to reveal and map the main structure of the items regarding elite sport, dimension reduction was undertaken. The analytical strategy for dimension reduction was as follows. In the first step (1), multidimensional scaling (MDS) was used to visualize the structure of items from our questionnaire. Then, (2) four-component principal component analysis (PCA) was performed to reveal the deeper structure of items and to understand the axes identified by using MDS.

For the two-dimensional solution of MDS, Young's S-stress formula was used with squared distances. The stress value was 0.167 which – according to Sturrock and Rocha (2000) – is adequate for 23 objects in two dimensions. From this phase of the analysis, we constructed Figure 3, which served as a raw map of Sustainable Sport elements (without the sets of variables in this phase of the analysis).

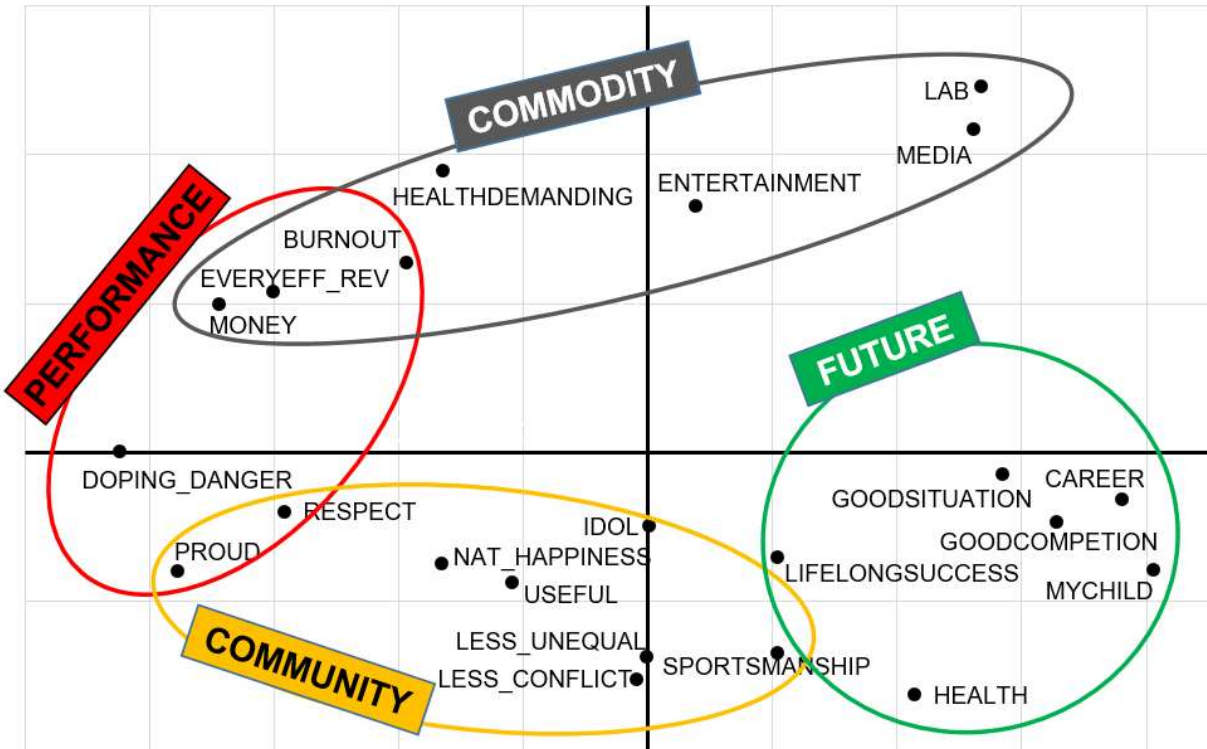


Figure 3. Map of elite-sport-based Sustainable Sport obtained from multidimensional scaling (MDS) and four-component principal component analysis (PCA) (For labels and statements, refer to Table 2.)

### 3.3 The main elements of sustainable (slow) sport

Table 6 contains the rotated component matrix of elite sport statements. Information based on this PCA-based solution helped us to accomplish and structure the raw map of Sustainable Sport with sets of variables (Table 3). This process also gave meaning to the emerging axes: PERFORMANCE and FUTURE are definitive for the horizontal axis, while COMMODITY and COMMUNITY are for the vertical one.

|                 | FUTURE | COMMUNITY | COMMODITY | PERFORMANCE |
|-----------------|--------|-----------|-----------|-------------|
| LIFELONGSUCCESS | 0.686  |           |           | 0.298       |
| CAREER          | 0.588  | 0.259     |           |             |
| HEALTH          | 0.582  |           |           |             |
| GOODSITUATION   | 0.569  |           |           | 0.357       |
| GOODCOMPETION   | 0.531  |           |           |             |
| MYCHILD         | 0.506  | 0.369     |           | -0.274      |
| ENTERTAINMENT   | 0.492  |           | 0.296     |             |
| LESS_UNEQUAL    |        | 0.625     |           |             |
| USEFUL          | 0.316  | 0.607     |           |             |
| NAT_HAPPINESS   |        | 0.605     |           |             |
| PROUD           |        | 0.531     |           | 0.449       |
| SPORTSMANSHIP   |        | 0.531     |           |             |
| LESS_CONFLICT   |        | 0.512     |           |             |
| IDOL            | 0.358  | 0.470     |           |             |
| LAB             |        |           | 0.658     |             |
| BURNOUT         |        |           | 0.617     | 0.293       |
| HEALTHDEMANDING | -0.357 |           | 0.562     |             |
| MONEY           |        |           | 0.548     |             |
| MEDIA           |        |           | 0.485     |             |
| RESPECT         |        | 0.251     |           | 0.543       |
| DOPING_DANGER   |        |           |           | 0.534       |
| EVERYEFF_REV    |        |           |           | 0.506       |

Table 6. Rotated component matrix of elite-sport-based Sustainable Sport questionnaire items (for the statements refer to Table 3) (Notes: components are FUTURE, COMMUNITY, COMMODITY and PERFORMANCE; values in grey italics concern connections between components; values of less than 0.25 were suppressed)

(1) FUTURE. According to the participants, elite sport can represent a good career opportunity and a means of lifelong success, and they can imagine their child being an elite athlete – as long as this helps maintain health (i.e. is not overly ‘healthdemanding’). Competition and pressure to perform are also thought to help to build a strong personality. ‘Entertainment’ has the least – albeit still significant – loading with FUTURE but also appears here: being able to entertain others appears to be important for sample respondents when the future of the individual is at stake. However, multidimensional scaling associates ‘entertainment’ rather with the COMMODITY

component of the system (when using a two-dimensional solution to map the elements). Being an ‘idol’ is also somewhat important here.

(2) COMMUNITY. Sport can reduce conflict and social inequality between people, thereby contributing to national happiness. Elite athletes may be seen as role models and, in general, respondents are proud of their elite athletes and believe that professional sport is a useful activity. All these considerations highlight the community component of sport (career, respect and ‘mychild’ are also important components here).

(3) COMMODITY. This component indicates that laboratory tricks (doping) and the media are rather detrimental to the situation of sport. When sport is overly demanding about the health of athletes it often leads to burnout. The role of money has increased too much – and not independently of the entertainment factor. As all the statements were negatively/critically worded to this component, we use the reverse of ‘commodity’ to define Sustainable Sport: it is thus not surprising that COMMUNITY and COMMODITY are the components that are most different in the system. Thus, what is needed is rather decommodification, whereby money and substitutability are relegated to the background.

(4) PERFORMANCE. Performance and respect go hand in hand in the model. However, a redefinition of performance is needed: prohibited performance enhancement (doping) is dangerous to the fundamental values of elite sport and, according to respondents, it is NOT good that elite athletes make every effort to achieve results. (For this reason, we reverse-coded the component labelled ‘everyeff’ as multidimensional scaling locates it in this component: ‘everyeff\_rev.’)

#### 4. Summary, additional questions, expected results

The study aim was to define the concept of sustainability to one of the most competitive and accelerated subsystems of human activity, elite sport, to gain a robust understanding of it. To succeed, we analyzed what elite sport means to society and what effects it may have on general wellbeing and sustainability. During the qualitative part of the research, well-known Olympians, and other elite athletes – the gladiators of our modern, accelerated era – gave us their thoughts about this topic in interviews. Following this (during the quantitative part of the research), others who love to watch sport or do it mainly in an organized/club-based form and sustainability-interested university students filled in our elite-sport-based Sustainable Sport questionnaire constructed using the former findings. From these samples, a picture of elite sport emerged whereby the fundamental values and factors that endanger sport could be evaluated.

We have mapped the views and values of individuals about elite sport to create an idealized picture of sport called Sustainable Sport. Based on the principal component analysis, a four-component solution was elaborated. According to this explorative model, we constructed the concept of Sustainable Sport which reflects the problems of sport particularly, and (hypothetically) of society and the economy in general. Sustainable Sport (1) is future-orientated due to its focus on the treatment and education of upcoming generations through sport, and its creation of balanced careers with long-term opportunities for pursuing sporting aims and an environment in which humans can develop in the long term; (2) emphasizes community by concentrating on the cooperation, happiness, and sportsmanship that sport can bring to individuals and society; (3) focuses on decommodification by creating a healthy media–sports relationship that uses money as a tool but not an end in itself, and treat athletes less as objects and more as humans; and, consequently, (4) redefines performance by supporting the creation of future-orientation, community, and decommodification in the sense of winning respect.

The research also sheds light on what a successful athlete’s career means to those who have experienced it. We have seen that cognitive dissonance exists. I identified the negative factors that affect their well-being through the acceleration of being an athlete and suggested that long-term planning, being viewed as human, and a “slow approach” could help with treatment. I am confident that this research will encourage organizations to help athletes during the transition period, thereby reducing the negative impacts on their well-being. I emphasize that coaches/mentors and career planning have a key role to play in making the professional sport more sustainable.

Another indirect, but no less important, the goal of the research is to envision a desirable, sustainable socio-economic model in which sport is part of a wider human environment. Increasing efficiency and results orientation can jeopardize well-being in the long run. The question is whether the pursuit of efficiency - quantified and often in monetary terms - has reached a point where the balance has already been lost.

Further research is needed to understand how sport can contribute to human wellbeing and how this can be institutionalized. Different social groups should be identified to target and promote the idea of Sustainable Sport more effectively. Professional athletes may be involved in further research to create a deeper understanding of what values sports represent for elite athletes, and how the latter can contribute to their mental and physical health and happiness. This paper may contribute as input for sport backcasting research (Király et al., 2013) in which the main goal



is to identify whether elite sport can be envisioned as sustainable. What would the future of elite and leisure sport be in an era of Sustainable Sport?

A deeper quantitative analysis is also needed. It would be valuable to identify whether in different countries and cultures the same problem structure exists as we have identified in Hungary. How can wider society be structured along with the elite-sport-based Sustainable Sport questionnaire (which should also be refined), and what types of clusters can be identified? What psychographic variables and economic situations significantly influence the responses? Answering these questions is important if we are to identify a path to a more sustainable society with more widespread wellbeing. The above-mentioned factors are also the limits of this research. Our definition of Sustainable Sport is based on a limited, medium-large (N=366) Hungarian sample which should be extended in terms of both quantity and quality (e.g., by addressing a broader stratum of society and/or members of different cultures).

The concept of Sustainable Sports, developed/defined through professional sports, is ultimately universal, not specifically aimed at professional sports or recreational sports. The term “slow sport” is the subject of serious debate in the academic world: and ‘slow’ was treated on an oxymoron basis, received with radical rejection, in the context of the two, the term sustainable sport was initiated, which we adopted). Since the concept was built on professional sport, (one of the most competitively socialized and accelerated human subsystems) I think the concept is well-founded. If there is a way and a means to move towards sustainability in such a results-oriented, performance and competition-oriented subsystem, why not apply it to another subsystem that operates less along with the growth logic, or even to the economic system as a whole? The message is that all forms of movement in sport must be sustainable: future-oriented, community-building, decodified, and people-centered. At the same time, performance and its measurement need to be nuanced.

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## 6. Appendix I

### 5.1 Building sustainability in sport: a clear offside or chance for a “slow” rebirth?<sup>2</sup>

#### **Abstract**

Training, selection, peaking, workloads are common notions associated with our society. However, these concepts are also inherent in sport as well, where ‘the winner takes all’. Thus the logic of modern sport resembles the capitalist milieu in which it has evolved: individualism, competitiveness, peak performance, and productivity are all essential components. Modern sport is also often depicted as being a remedy to society’s ills, making sport a linchpin of the population’s well-being: empowering control over health, educating people to reach their goals or serving as a good example for future generations. But there is a danger that modern sport is primarily becoming a tool for generating profit.

The aim of this paper is to formally examine how sport is related to the principles of sustainability, and its potential impact on well-being. Although several project aims to safeguard three dimensions of sustainability: environmental, social and economic values, drawing on a growing body of scholarships on sustainability best and worst practice, this article discusses the environmental, social and economic consequences of sport activities, using the aspect of society and insights from sport mega-events.

**Keywords: economic, environmental, legacy, public value, social, sport, sustainability, well-being**

#### **Introduction**

Sport and sustainability. Easily used, although hardly evident concepts. Searching in Google Scholar the first returns 196000, the latter 172000 in the titles of the articles. However, only 111 articles are having both at once. Why does this happen? What consequences can we draw from it? Are the disciplines in an early stage of research and thus having fewer articles? Marrying the two concepts having nothing common? Or those researchers are existing, only the

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<sup>2</sup> Attila Szathmári: Building sustainability in sport: A clear offside or chance for a „slow” rebirth? (Vezetéstudomány - Budapest Management Review, XLVIII. ÉVF. 2017. 11. SZÁM/ ISSN 0133-0179. <https://doi.org/10.14267/VEZTUD.2017.11.04.>)

two keywords are missing from the title? I believe none of the above explanations are irreprehensible. Sustainability became such „vogue word” like strategy or globalization. Utilizing it in articles or at presentations for the sake of having it seems indispensable. Asking for an accurate definition could put one in trouble. Researchers tend to struggle with the issue as well.

The situation regarding sport is rather different. Although a favorite topic, its research accelerated in social sciences only in the last decades. Moreover in the last years the extent of the development and alteration of the field was enormous. On the other hand, the entertainment connected with the sport makes it hard to relate the notion to the sciences. Furthermore, – as detailed later – its conceptualization still stands on fugacious grounding.

In this paper I describe the types of sport then the pillars of sustainability. From society's viewpoint I explore the connections, draw the shared segments and answer the question: how do those two concepts coherent in researches?

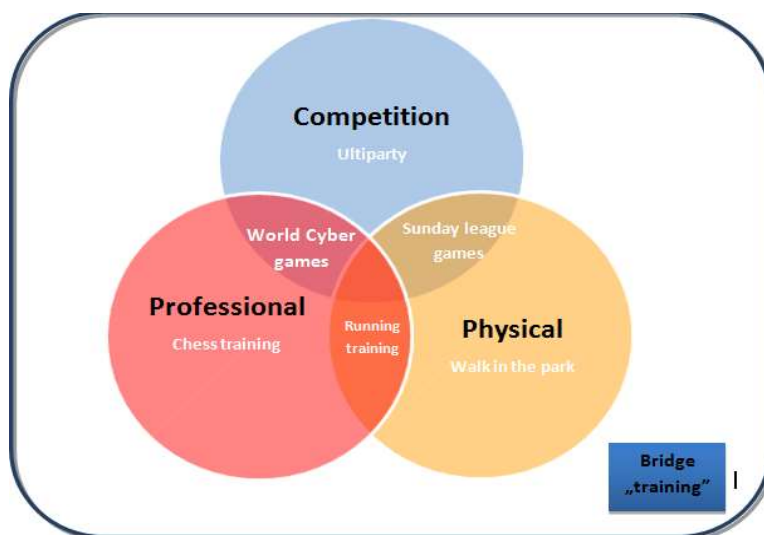
## **Sport**

An important, not economic element touched in the definition of the sport: the sport, the exercise is a cultural universal. An activity, which stands as an element of religious rites, play or entertainment being an organic part of human cultures. To the extent the sport, exercise depends on the specific society, to its culture, that would prevent estrangement, socializing as a tool to promote integration of individual values, so can react to the society. Sport, as a social subsystem has its internal laws. The nature of the operation, the change in the purpose, always affected by the historical, social, political or economic change of the environment. (Földesiné, Gál, Dóczy, 2010)

One of the most comprehensive definitions made by Nagy, who considers sports are based on historical experiences and standards, playing a form of activity, that separated from direct production processes, competitive type, emotional, which are both suitable for excitement creation and reduction. (Nagy, 1995) The Oxford Dictionary (2017) defines it as: „An activity involving physical exertion and skill in which an individual or team competes against another or others for entertainment.” While official sport definition: "Sport means all forms of physical activity which, through casual or organized participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels.” (European Sports Charter, 1997)

From a research point of view, it was imperative that the narrow-broad framework to further break down, and ask the question: “what is the subject of exchange here?” Along with this issue Dénes, Misovitz (1994) and Nagy (1995) sharply separated professional sport (where entertainment, the others movement became the subject of exchange) from the recreational sport. An enormous range of synonyms (professional, elite, high-performance) used to show the main differences, as it is the former, where the athletes get paid and pursue it as a profession. The latter is done in recreational time, for the sake of exercise, or health prevention. From consumer point of view, we can identify an active-passive boundary, but the separation can not be so sharp. There are amateur athletes, who exchange entertainment (see Andorra national football team), and vice versa, there are some professionally paid ones whose product has hardly been consummated.

Although they are professionals, by their actions - rather than creating pure profit via views – they create something else, less tangible, which leads somewhat towards sustainability. In its examination of the leisure sport and professional sport, Henderson (2009) and Pitts (2002) pointed out a significant disproportion. In the editions of the last twenty years of Sport Management Review and the Sport Marketing Quarterly, approximately five times more articles dealt with the professional sport, than recreational relatives. Although I think, that the definition and the separation are far from perfect, the two sections can be clearly confinable and well analyzable. The classic sport definition includes professionals who compete in a physical activity is in the center of the diagram:



1. chart: Activities regarded sport as per definition (based on Andrés, 2002)



## Sustainability

Although the word: sustainability has been used only for a few decades, its content can be discovered already back in the 18th century at Malthus (1798). Malthus thought that if the human population continued to grow, food production would not be able to keep up with demand, so was arguing that the human population was at risk of outgrowing its carrying capacity. In 1864, the English economist William Stanley Jevons observed that technological improvements that increased the efficiency of coal-use led to the growing consumption of coal in a wide range of industries. He argued that, contrary to common intuition, technological progress could not be relied upon to reduce fuel consumption. (Jevons, 1864)

The modern sense of term: "sustainable" was first mentioned by Brown R. Lester (1981). Sustainable development theory begins to spread in the '80's when The Brundtland Commission officially released *Our Common Future*, also known as the Brundtland Report. Two markedly different trends also emerged concerning the nature and perception of the economy. Ecological Economics and Environmental Economics approach differ in the following: while the former does not necessarily hold the economic growth a sustainable process, the latter does not call into question the sustainability of economic growth. (Bajmócy – Málovics, 2009)

Environmental sustainability, however, is often defined in two different ways. The so-called weak sustainability signifies the underlying concept that natural and human-made capitals can be substituted with each other and the level of consumption can be maintained as long as a possibly decreasing level of natural capital is compensated for by the increase in human-made and human capital. In contrast, strong sustainability does not allow for such a perfect substitution and insists that the stock of natural capital should remain constant to ensure that future generations have the possibility to enjoy the flows that nature provides. (Jackson, 2010)

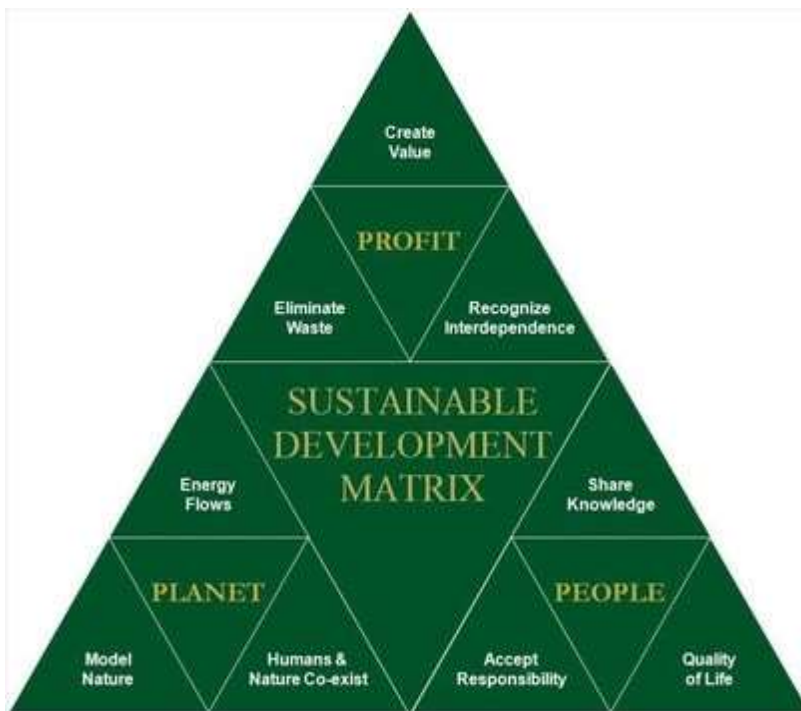
Several researchers have made attempts to summarize the content of the expression, (Daly, 1991; Pearce & Atkinson, 1995; Kerekes, 2007), the concept of the Brundtland report remained the most referred to:

*„Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Our Common Future, 1987: 27.)*

That is, do not jeopardize the well-being of children and grandchildren, applies not only the natural environment. Two important definitions arise: resource constraints and the need related

the poverty, the natural environment and the issue of social equality. But the phrase raises several questions. First of all, do the emerging needs have to be met? Second, how do we know in a specific moment what will be a legitimate need for the future generation? In any case, Littig and Giessler (2005) emphasized the need to change human lifestyles in order to preserve the ecological system and the sustainability of resources.

So the definition of sustainability has enlarged to three pillars where in addition to the environmental aspect, the economic and social pillar has an equally important role.



**2. chart: The three-pillar sustainability (source: <http://oncommunityranch.org/ecological-sustainable-design-tool-the-sustainable-development-matrix-ethosolution/>)**

With this enlargement, however the interpretation of a wide range of options has been opened. According to Jones, Selby & Sterling (2010) the conditions for both humankind and environment of mutual prosperity, security and the chance of survival can co-exist and have to be met. Much more generally, Senge (2008) suggested to consider every boundary, which will contribute to a healthy community of the future. McMichael, Butler & Folke (2003) concluded to maximize the chances for the environment, and the social conditions enable to help reaching of safety, well-being, and health. Ehrenfeld (1978), formerly widened those with biodiversity, human rights, equality, openness, and respect dimensions.

While analysing the several aspects of the sustainability White (2013) checked - with the establishment of world-cloud - the phrases that appear in different sustainability - definitions.

As a result, the most common "social," "environment," and "economic" words were closely followed by the "human," "resource" and "development" phrases. But the "community," "next generation" and "needs" words were also common. Surprisingly, the "well-being" was omitted.

In another experiment Vallance, Perkins & Dixon (2011) sorted the different trends and created a three-dimensional model, in which the "development sustainability," "bridge sustainability" and the "maintenance sustainability" established. The first addressing basic needs, the creation of social capital, justice and so on; "bridge sustainability" concerning changes in behavior so as to achieve biophysical environmental goals. While "maintenance sustainability" referring to the preservation – or what can be sustained – of sociocultural characteristics in the face of change, and the ways in which people actively embrace or resist those changes.

The concept of sustainable development at the 2005 World Summit and by the 2006 UN High-Level Panel on System-Wide Coherence, revealing that world leaders at the Summit segregated the three pillars of sustainable development, while the Panel attempted to apply sustainable development as a cross-cutting issue.

In the first table I show the analysis scales and examination scopes linking sustainability and professional sport. My aim is to analyse the environmental, social and economic sustainability of professional sport activities, using the aspect of society and insights from sport mega-events.

| EXAMINATION SCOPE | ANALYSIS SCALE   |  |  |
|-------------------|--|--|--|
|                   | Micro<br>(Individual)  | Mezo<br>(Company League)   | Macro<br>(Mega-event State)  |
| Sustainability    | <ul style="list-style-type: none"> <li>• Consumer habit</li> <li>• Health protection</li> <li>• Environmental awareness</li> <li>• Empowerment</li> <li>• Self-esteem and life skills</li> </ul> | <ul style="list-style-type: none"> <li>• Employment</li> <li>• Community-wide participation</li> <li>• Competitiveness</li> <li>• Capital investments</li> <li>• Environmental management</li> </ul> | <ul style="list-style-type: none"> <li>• Social equality</li> <li>• State investment</li> <li>• Community cohesion</li> <li>• Human capital</li> <li>• Social capital</li> <li>• Event policies</li> </ul> |
|                   |  | <ul style="list-style-type: none"> <li>• Carbon footprint</li> <li>• Energy consumption</li> <li>• Water usage</li> <li>• Well-being</li> </ul>  |  |

3. chart: Linking Professional Sport and Sustainability

## **Keeping the field green: environmental sustainability became winning strategy in professional sport**

Sport have been deemed to be a special business, because of the need to attain two different objectives together, namely, success on the field and success in business performance. To achieve these goals, sport institutions must organize their resources and adapt their financial structure to be able to attain acceptable efficiency levels as well as an adequate sustainable growth. The required balance in dual value creation can also be shifted: research from Stocker, (2012) shows that the sporting success is far more important in the professional Hungarian sport businesses than the economic success, and the market is not valuing the sporting success in tangible terms to the amounts of its creation costs. Findings indicate that the teams that operate close to the sustainable growth ratio become more efficient on the field than those where the differences are greater.(Guzman, 2010)

The high interest generated by sports mega-events (Olympic Games, football World Cups, European Championships) means millions of people try to be on the spot. Consumption, travel, and moving of goods are concentrated in a small area for a short time. This means a trade-off challenge and leads to a significant environmental impact. Events potentially impact upon local ecosystems; utilize reserves of exhaustible natural capital, and contribute to carbon emissions related to climate change. Furthermore, in the context of environmental challenges, the question has been asked: what is the appropriate level of environmental impact, legacy one generation of a sport should make on the next generation? (Mallen, Adams, Stevens, & Thompson, 2010) According to Schmidt (2006: 287.), the discussion on the environmental impact of sports, whether played or watched, has two objectives:

- to reduce the ecological footprint of sports activities
- to exploit the popularity of sports to raise environmental awareness in general.

The event-focused approach (Cantelon & Letters, 2000; Jones, 2008) drew attention to the local eco-systems, the irreplaceable environmental capital, and climate change.

Benefits of organizing a major sporting event can have: infrastructure development, sports facilities, improving competitiveness, employment increasement, etc. Concerning the biggest sport event in the world, the Olympics, the impact of economic aspects gradually shifting the balance towards other inputs. From the Games in Lillehammer in 1994 through to Sydney 2000, and more recently in Torino in 2006, and London 2012 the environment has increasingly become a core and a winning competitor in the process of selecting the host of the Olympic

Games. So, the International Olympic Committee (IOC) has “recognized the importance of Environmental Sustainability by adding a paragraph to the Olympic Charter that positioned the environment as the third pillar of Olympism (alongside the first two components of sport and culture)”. (Paquette et al., 2011: 356.)

Gratifyingly starting with Lillehammer Winter Olympics the organizers of the 1994 Winter Olympic Games in Lillehammer developed a comprehensive environmental action plan, and the 2000 Summer Olympic Games in Sydney took steps towards staging the first ‘green games.’ More recently, organizers of the 2006 World Cup Football competition in Germany introduced Green Goal™. The first environmental initiative at a FIFA World Cup set environmental protection targets, working to reduce resource use regarding water, refuse, energy and transport, and with plans to offset the 100,000 tons of carbon emissions. Indeed, London 2012 included as part of its winning Olympic bid a commitment to measure and take steps to minimize the environmental impacts of the forthcoming Games. The London Olympics also served as demonstration purposes: excellent eco-rated Olympic village, hydrogen fuel cell vehicles operating in an eco-driving initiative way. (London 2012, 2005b) With the environment playing a key role in the concept became a winning scenario. (Steiner, 2006)

Organizing Committees of the Olympics face issues regarding what should the future of the event be, i.e. questions at the ‘hyper-strategic level.’ There are then a series of ‘more-strategic’ questions perhaps concerning how far existing waves of sporting activity can be made more sustainable, or more operational problems regarding the placement of events, or how far mitigation of negative externalities can be achieved by policy changes. (Morrison-Saunders & Therival, 2006)

Measurement of environment targets become more and more significant issue. Collins, Jones & Munday (2009) used two methods, ecological footprint, and environmental input-output model to provide valuable information for event organizers and policy-makers on factors influencing the scale of an incident’ environmental impact, and the types of strategies needed to reduce the effect of visitor travel. One of the first measurement of major sports events was made by Collins, Flynn, Munday & Roberts (2007) in Great Britain. The Ecological Footprint results show how, within a short space of time, a large environmental impact can be produced by visitors attending major events such as the FA Cup Final. The number of visitors, how they travel to an event, the types of food and drink they consume and the wastes they produce can generate significant ecological impacts.

In addition to sports events and tourism, there is a serious list of examination on facilities. The focus is on developing sports facilities (stadiums, halls, courts) to the most environmentally efficient way, decreasing the use of natural resources. This, in turn, leads from professional sport to recreational, since there are similarities. Same facilities can be utilized by both professional and amateur athletes, and there are several ways of leisure activities, like City Marathons visited by thousands in a short time. So similar environmental challenges occur as a major competitive sports event. Many feel the greatest challenge is the environmental education, changing environmental attitude. Successful and respected athletes can be a role model and initiate this.

### **More than legacy: economic sustainability in sport mega-events**

Nowadays the corporate sustainability is closely related to corporate social responsibility (CSR), and today the area is completely "in sync," or overlapped. To put it another way, both CSR and sustainability understand that the context, community, and environment in which a business operates is integral to that business' success. Sustainability, then, goes one step further by taking into account the needs of the future generations. (Montiel, 2008) Also, in the field of sports economy stakeholders motivated in long term planning, smart growth, and cost reductions along. In professional sport decision makers soon found essential to keep the spectacle, excitement and unpredictability imbalances in financial resources and conditions in the short term should be avoided.

Consideration is now being given to the unique context in which sport operates, and some authors argue that nature and the role sustainability plays in a sport organization may be different than in other industries (Babiak & Wolfe, 2007). For instance, Smith & Westerbeek (2007) claimed that sport, broadly defined, has some unique factors that may positively affect the nature and scope of sustainability efforts including mass media distribution and communication power, youth appeal, positive health impacts/association, social interaction, and sustainability awareness.

The concept of legacy regarding sport mega-events closely connected with sustainability, however, has appeared to gain enormous traction and become an important part of the "triple bottom-line" evaluation processes where city-states seek to broaden the inputs for an event's evaluation beyond economic impact. (Carlsen & Soutar, 2000) As Cashman (2005) notes, legacy has been viewed predominantly in a positive light where, . . . the term is used by organizing committees, it is assumed to be entirely positive, there being no such thing as

negative legacy when used in this context. [Secondly,] it is usually believed that legacy benefits flow to a community at the end of the Games as a matter of course. (p. 15) The results of the 2002 conference was the identification of six tangible and intangible legacies to hosting Olympic Games; economic impact, cultural considerations, social debate, sporting legacy, political legacy, and the value of Olympic education.

Sport franchises are no different from other companies in their intent to earn a profit and positively impact the economy in the cities in which they operate. Although sport teams are not major employers, they can have a considerable economic impact on a city, evidenced primarily in the spending generated by fans. (Blair, 1997) Unlike traditional businesses, however, sport franchises are valued on their revenues, rather than cash flow and assets. Since professional sport teams hold a high profile in the communities where they are based, this category is perhaps more important to sport teams because, to succeed financially, each team is dependent on the local community to purchase tickets and other team goods. (Extejt, 2004) It appears that teams across leagues all engage in similar CSR, legacy and sustainability activities and practices with a primary focus on youth, education, health, and community. As some of these areas are beyond the “core competencies” of sport teams and leagues, a relevant dimension to explore would be the institutionalization of these practices in sport.

The sport's success is beneficial in social terms, whereas the local community have a sense of pride and cohesion. The financial sustainability of the sport success also, - due to the expanding commercial opportunities through the operation of the organization - can be placed on the business basis, and to be independent of the current support policy. They refer to a path of socio-economic development that would be financially balanced, socially equitable, ethically responsible and adequately integrated into the long-term ecological balance of the natural environment. Sustainable development is also a dynamic process that continues to evolve and grow as lessons are learned and ideas re-examined. (Furrer, 2002) American sports have "draft-system" and the application of the salary cap to help the case. In Europe, the latest initiative in football is the financial fair-play, which applied to lead professional clubs to exploit the administrative incentives, predictable, long-term financial planning.

Regarding recreational sport it has been much harder to rise on similar initiative. Szabó (2012) analyzed the operation of recreational sport, focusing on markets, value creation and operational level. Emphasizing that from sporting investment there is a priority to equality and environmental sustainability investments.

## **Value for the public: social sustainability impact on sport**

Public value describes the value that an organization contributes to society. In contrast to other management concepts, public value systematically takes a societal viewpoint, since it presumes that individuals develop and grow depending on the society they live in. It is definitely not fully captured in an annual report or financial statement. Public value is a unique concept to explicitly analyze how an organization contributes to the quality of relationships between an individual and what is called “society”, i.e. collectively shared values, which constitute social relations and help integrate individuals in a social system. Whereas the notion of corporate social responsibility takes primarily moral-ethical considerations into account, public value and social sustainability broadens the perspective to a number of other collectively shared values.

The quality of life, education, justice, the development of communities is seen as the essential elements of social sustainability and human well-being. These are values that important for now and future generations. Surprisingly, few scholars have attempted to bring ‘sustainability language’ into the discussion about high-performance professional sport. Scholarship exists about how sporting activities can contribute to peace, cultural diversity and tolerance (Barker et al. 2011; Dagkas, Benn, and Jawad 2011), social justice, social inclusion and wellbeing.

In most general texts on sustainable development, the social needs of present and future generations are discussed regarding equity, ethics, and rights. Equity is regarded as denoting fairness – social justice and equal access to opportunities – generate a range of positive social effects including: reinforcing collective identities; uniting people; improving self-esteem; increasing civic pride; raising awareness of disability; inspiring children; providing experience of work; encouraging volunteering, increasing participation in sport; and promoting well-being/healthy living. (Smith, 2009) But where competition exists, there should be winners and losers. If we consider increasing capabilities to carry out valuable activities to human well-being important, the development and the quality of life not only depends on the achieved performances but also on what options are available to the one in that society. (Pataki, 1998) From sport and social sustainability point of view, health became the central topic, around most of the researches made. The United Nations Development Program (UNDP) reports: „People are the real wealth of a nation. The real objective of development should be to create an enabling environment for people to enjoy long, healthy and creative lives.” (Human Development Report 2010: 24.)



Taking into consideration that according to Nefiodow the carrier of a new long economic cycle will be health in a holistic sense - including its physical, psychological, mental, social, ecological and spiritual aspects - the fundamental innovations of the sixth Kondratieff-waves are "psychosocial health" and "biotechnology". (Nefiodow; Nefiodow & Simone, 2014) But how can sport help health both physical and psychological? Lawson (2005) found that sport should not be seen as a homogenous entity. Rather as two underlying philosophies (high performance and recreational sport) which are radically different from each other. Therefore sees the relevance of sustainability is slight about the professional sport in which your keywords are the training, selection, peak performance and load, while fully compatible with the values of recreational sport, often identified with cooperation, participation, relish, and delight. Recreational sport can create a social network, develop community identity, improve human health, can have a real effect on the well-being and human capital.

Despite its importance, social needs are recognized as the least explored element of Brundtland's widely accepted definition of sustainable development. (Smith, 2009) Social impact can be defined as the manner in which events "affect changes in the collective and individual value systems, behavior patterns, community structures, lifestyle and quality of life." (Balduck, Maes & Buelens, 2011: 94) The above definition shows how the understanding of social elements is involved. That is why several concepts tried to separate the individual, community, organizational and institutional sustainability while talking about sport. From the institutional point of view Szabó (2011) wrote, that sport can catalyze the dialogue between different cultures and help overcome the various forms of discrimination. Chalip (2006) and Oakley – Rhys (2008) emphasized the sport society building role, the social cohesion, and strengthening the community spirit. Loland (2006) stressed that in individual standpoint, we might consider how ones within performance sports can flourish. The continuous quest for new records is built on the impossible quest for unlimited growth in limited systems.

From this perspective, the question arises as to how the sport itself, affect the relationship between people and the environment? The anthropocentric standpoint is that the professional sport can be pursued in such a way that build mutual respect and care about prosperity. The previous researches also made attention on the psychological aspects. Thus, in relation to the early burnout of athletes, Coakley (1992) examined whether we can speak of a social phenomenon or an individual problem. He concluded that there is a fault in social organizations and their transformation is inevitable. While researchers suggest that the performance needs and resources of professional sports limit the individual sustainability opportunities of

professional athletes, they also indicate that a short career does not preclude the sustainability of longer-term careers in other areas. Although it is well-established that the ability to manage stress is a prerequisite of sporting excellence, the construct of psychological resilience has yet to be systematically examined in athletic performers. (Fletcher & Sarkar, 2012)

The importance of individual well-being through athlete's career explored by Lundqvist (2011). He established definitions of well-being, the purpose of the study was to investigate factors characterizing and signifying well-being and psychosocial factors on both a global and a contextual level. Social well-being included seeing others' positive characteristics, rejoicing in others' successes, offering consolation in adversity, and providing unconditional support regardless of performance.

The difficulties associated with the closure of the professional career, employment and the relationship between human capital and Ling & Hong (2014) encountered by athletes in the course of their sports careers. Human capital refers to the summation of knowledge, skill, health, information and so on that is used to increase the future effectiveness or realize the value multiplication that is gained by the investment activity. The issues relating to human capital have grave consequences for the re-employment of the retired elite athletes, including a lack of education and qualifications, poor health caused by illness and injury related to sports, and narrow skill sets brought about by specific training.

It came to the conclusion that in the professional sport problems detection is in the foreground rather than solving. This seems to be the least sustainable from the six sub-systems. After all, if you're talking about a system where internal stakeholders (athletes) are trying to generate values to convey the outsiders (society) while forced short interest-follow (during a short career earning prosperity for the whole life, overloaded, or by using the doping). And because the system is lacking long-term thinking, the accumulated human capital remains unused, no career model, and there are rarely respected coaches, who care the future generations. In the absurd nature of the system, athletes - quoted the examples of the youngs - would not do it again and take the same burden.

## **Conclusion**

My aim was to show how the two concepts (sustainability and sport) are coherent to each other. I examined it leading through three pillars of sustainability. The results show that sustainability more and more became an important factor in the field of sport. From mega-sports events strategies to individual recreational activities, elements of sustainability can be found. The

problems regarding for instance with social sustainability is still mounting, as athletes often seen as peak performance generating thing, equal to a money making tool. Hence athletes get over the peak of its physical performance, they are simply "thrown away". That is one of the several reasons why sustainability should be meticulously managed through the three-pillars, not over-emphasizing one, because for example it will be in vain sports club or a sports enterprise became in economic terms sustainable through reaching long-term financial targets, while operating a system which exploits the human capital. Pillars of sustainability should be explored in linked unit, rather than decomposed, as some point in this study I followed.

Finally, let me end with actual words of Elemer Hankiss (1983: 248.): "Because, if a value permanently combats with manufacturing issues, sooner or later, the erosion of its social value starts. While losing their credentials, enticement weakens, it stops being able to control of the human consciousness and behavior; but it could be able to plaything the formal ritual by becoming an obstacle to the emergence of a new, functional values. This is the Foundation of renewal. "

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## 7. Appendix II

### 6.1 Who cares about Gladiators? An elite-sport-based concept of Sustainable Sport<sup>3</sup>

#### **Abstract**

The aim of this study is to define the concept of sustainability as it applies to one of the most competitive and accelerated subsystem of human activity, elite sport (or professional sport) to construct a robust understanding of it. Based on qualitative research with Hungarian Olympic athletes, we created an elite-sport-based Sustainable Sport questionnaire with 23 statements to test and map emerging topics related to elite sport. Revealed elements of Sustainable Sport include (1) future orientation, (2) community, (3) decommodification, and (4) a redefined concept of performance. This definition reflects the problems of sport particularly, and (hypothetically) of society and the economy in general. It points toward both environmental sustainability (strong sustainability) and enhanced wellbeing and may serve as a broader guide to human activity.

#### **Keywords**

degrowth; elite sport; leisure sport; strong sustainability; wellbeing

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<sup>3</sup> Attila Szathmári & Tamás Kocsis: Who cares about Gladiators? An elite-sport-based concept of Sustainable Sport. (Sport in Society, <https://doi.org/10.1080/17430437.2020.1832470>).



## 1. Introduction

In seeking to reveal the conditions for a non-growth-oriented existence by questioning the dominant economic logic, it is necessary to determine why alternative economic systems based on a logic of non-growth are necessary, and what their characteristic features are (Kallis 2011; Harangozó, Csutora, and Kocsis 2018; Buch-Hansen 2018). We can simplify this huge task by zooming in on one subsystem that is of public interest, whose internal logic is easier to grasp, and whose language is more understandable. One such subsystem is sport, of which the competitive type (elite sport or professional sport) attracts great interest everywhere, whose successes are met with major publicity, and whose operational logic, we think, clearly reflects a growth-oriented economic approach.

Professional sport has gone global – similarly to our economic system (Thibault 2009; András and Havran 2014). It requires ever more support: gigantic infrastructure, either for showcasing high-level practice or providing mainstream entertainment; thus, in this way it resembles mass tourism and hyper-merchandising (Vrondou 2017; Vierhaus 2019). We have entered an era in which sport is treated as a potential means of making a profit. Thus, just as the counterexample of mass tourism can be identified as wellbeing-enhancing tourism (Smith and Diekmann 2017), the opposite pole of commodified elite sport can be identified as leisure (amateur) sport, which is locally based and affordable to the masses. We imagine different types of sporting activities as a continuum at the opposite ends of which are located leisure sport and elite sport, although the whole range is affected by sustainability issues (Graham, Trendafilova, and Ziakas 2018; Trail and McCullough 2020).

Leisure sport can be analyzed independently, operates according to a different logic to elite sport, and can be used to support ideas related to a non-growth-oriented society and economic logic. Leisure sport and elite (professional) sport mutually draw on each other, but if the values of leisure sport (or just ‘leisure’ – see Vaugeois, Schroeder, and Harnett 2017) were more

dominant, they would represent an operational logic that better supports individual and social wellbeing. However, Sustainable Sport, in our understanding, is not a specific type of sports activity, either leisure or elite, but a general philosophical orientation applicable to the whole spectrum of activity. Of course, Sustainable Sport seems more compatible with the leisure sport end of the theoretical continuum, but nowhere can its dominance be guaranteed in an era deemed The Great Acceleration (Steffen et al. 2015).

Thus the concept of Sustainable Sport is of broader strategic importance. It is key to both environmental sustainability and human wellbeing. The study aim is to describe an elite-sport-based concept of sustainability (Sustainable Sport), as elite sport is one of the most competitive and accelerated subsystems of human activity. Our research question in this paper concerns whether a clearly defined subsystem – namely, elite sport – with all the attendant symptoms of a growth-oriented society, can be a source of individual and social wellbeing. To investigate this, we use systemic, two-level (qualitative and quantitative) research. We examine which problems and ideas can be identified in relation to this theme, and how these can lead to the development of a concept of sport that increases individual, social, and, ultimately, environmental wellbeing.

Based on the exploratory research described in this paper, we construct a concept of Sustainable Sport which (1) is *future-orientated* (Aczél 2018) as it concentrates on the treatment and education of new generations of participants in sport, promotes balanced careers that offer long-term opportunities for pursuing sporting aims, and an environment in which humans can develop over the long term; (2) emphasizes *community* by concentrating on cooperation, happiness, and the sense of sportsmanship that sport can bring to individuals and society (Hamilton and LaVoi 2017); (3) focuses on *decommodification* (Gerber and Gerber 2017) by creating a healthy relationship between media and sport using money as a tool but not as an end in itself (profit-seeking vs. surplus-seeking – Spaaij and Westerbeek 2010), and treats athletes

less as objects and more as humans; and which consequently (4) redefines *performance* (sufficiency – see Princen 2005) by supporting future-orientation, community, and decommodification through a focus on winning respect.

If Sustainable Sport as a concept works for elite sport, it may also work in a broader sense: for all sports and non-sports activities that can foster sustainability and wellbeing. In line with this understanding, sports events may be neutral and beneficial as they can convey values such as health, sharing, and friendship, and can help ease tension, enhance social harmony, and contribute to managing conflict. Thus, in this specific sense we identify social issues as a key element of the broader aim of fostering environmental sustainability. The other (economic and environmental) aspects of sustainability (according to the classic three-pillar approach – Barbier 1987) can be strengthened by transforming society in line with the values of Sustainable Sport.

The structure of this paper is as follows: Section 2 sketches out the significance and theoretical background of our research: (2.1) sustainability, and (2.2) the dualism between leisure sport and elite sport, with special focus on the spirit of the Olympic Games. Then, (2.3) we offer a systemic view of strong sustainability, leisure sport, and elite sport within the spheres of nature, society, and economy. Section 3 describes our research, both qualitative and quantitative, but with greater emphasis on the latter: the method and sample used in the quantitative research are detailed here. Section 4 presents results, while Sections 5 and 6 extrapolate and discuss these results and draw conclusions about the emerging idea of Sustainable Sport.

## 2. Theoretical background

### 2.1 Basic concepts of sustainability

One-pillar models of sustainable development clearly give priority to the ecological dimension (Littig and Griessler 2006). Based on this approach, sustainable development should mainly be focused on preserving the ecological systems and resources necessary to support economic and social life – an important prerequisite for meeting the future needs of humanity. In accord with this objective, sustainability science ‘as a problem-driven discipline’ is concerned with addressing the practical challenges caused by climate change, habitat and biodiversity loss, and poverty (Kocsis and Kuslits 2019).

A well-known definition of sustainable development is the one which was drawn up by the World Commission on Environment and Development: ‘development that satisfies the needs of the present generation without compromising the chance for future generations to satisfy theirs’ (WCED 1987; Loland 2006). A new operationalization of this concept is the 17 Sustainable Development Goals of the UN with the associated 169 targets. These are designed to help eliminate extreme poverty and hunger, improve health and education, achieve gender equality, ensure a supply of clean water and energy, achieve sustainable consumption and production patterns, reduce inequality among nations, promote innovation, make cities more sustainable, combat climate change, and protect oceans, forests and ecosystems. This is a comprehensive and ambitious agenda for 2030 that covers all three pillars of sustainable development: economic wellbeing, social inclusion, and environmental sustainability (Costanza et al. 2016).

The proposed equal treatment of the three pillars (society, economy, and environment) is based on the conclusion that human needs cannot be sufficiently met only by providing an ecologically stable and healthy environment, but that – if a society is indeed committed to

sustainability – equally legitimate social and cultural needs ought to be taken care of as well. Sustainable economic, social and cultural conditions and values are deemed to be resources that should also be preserved for future generations.

Another line of argument presumes that ecology, the economy, and social matters are three individual – albeit connected – systems which will have to remain stable in the long-term so as not to jeopardize the achievements of civilization (Littig and Griessler 2006). However, it is a fact that in relation to the above-mentioned three pillars a clear theoretical concept of social sustainability (Spangenberg and Omann 2006) is still lacking.

In our approach, social sustainability reflects the quality of societies. It signifies nature–society relationships mediated by work, as well as the relationships within society. Social sustainability is ensured if work within society and the related institutional arrangements satisfy an extended set of human needs and are shaped in a way that nature and its reproductive capabilities are preserved over a long period of time, and the normative claims of social justice, human dignity and participation are fulfilled. This concept is also in harmony with the notion of social futuring (Szántó 2018; Kocsis 2018) and strong sustainability (see Section 2.3). As sport is an inherently social issue (with connections to economic and environmental phenomena), this paper reflects the conviction that the first step towards general sustainability is the restructuring and redefining of relations and ambitions among people.

## 2.2 The dualism between leisure sport and elite sport and the spirit of the Olympic Games

According to an official definition of sport which highlights the physical and social aspects of the activity, ‘Sport means all forms of physical activity which, through casual or organized participation, aim at expressing or improving physical fitness and mental wellbeing, forming social relationships or obtaining results in competition at all levels’ (European Sports Charter

1992). However, when we talk about sport more generally, we normally refer intentionally or unintentionally to two clearly separable dimensions of it: elite (professional, high-performance) sport, and leisure sport. The basis for this separation is mainly economic: it concerns objects of exchange. In elite sport the exchange factor is *entertainment*, and the aim is to entertain others who watch (see the ancient gladiators), while with leisure sport the key word is *participation*. Another important difference is that in elite sports the participants are professionals who are paid for the entertainment they provide. Associated words include training, selection, peaking, workload, and so forth. However, in leisure sport the aim is traditionally health- and involvement related, as well as enjoyment, cooperation, and fun (Table 1).

|                        | LEISURE SPORT  | ELITE SPORT  |
|------------------------|--|--|
| <b>LABELS</b>          | <i>AMATEUR SPORT</i>   | <i>PROFESSIONAL SPORT</i>  |
|                        | <i>EASTERN LOGIC</i>   | <i>WESTERN LOGIC</i>   |
|                        | <i>AESTHETIC ORIENTATION</i>   | <i>HEROIC ORIENTATION</i>  |
|                        | <i>PLEASURE &amp; PARTICIPATION</i>                                  | <i>POWER &amp; PERFORMANCE</i>   |
| <b>ACTIVITY</b>        | Hobby<br>Non-competitive   | Profession<br>Competitive  |
| <b>GOAL</b>            | Leisure time<br>Health   | Income<br>Progress   |
| <b>ROLE</b>            | Consumer<br>Participant  | Workforce<br>Spectator   |
| <b>EXCHANGE</b>        | Doing sport<br>Equipment   | Attention<br>Attraction  |
| <b>CHARACTERISTICS</b> | Cooperation<br>Involvement<br>Complementary opposites<br>Fun<br>Slow | Training<br>Selection<br>Exclusive opposites<br>Peak form<br>Accelerated |

Table 1: Leisure sport vs. elite sport (Source: authors' own compilation based on Horne, Tomlinson, and Whannel 2005; Coakley 1994, 2016; Pang and Macdonald 2016; Kocsis and Szathmári 2020).

In Table 1, we offer alternative labels for the Leisure–Elite distinction that are used mainly in

this analysis. These refer to the fact that different analytical focus lead to nearly the same dichotomy that is revealed in our analysis using different umbrella terms. For example, from a business perspective the concept of Amateur vs. Professional can be used to characterize issues, and from a cultural perspective Eastern vs. Western. Coakley's labels of Aesthetic vs. Heroic orientations or 'Pleasure and Participation' vs. 'Power and Performance' may also be useful notions for broadening – or changing – the focus of analysis (Coakley 1994, 2016; Szathmári and Kocsis 2020).

High-performance elite sports attract enormous public attention and have impacts that are both global and local, cultural and economic.<sup>4</sup> This is especially true with regard to large-scale sporting events such as the Olympic Games. This event has a long history and represents the highest level of competition and the peak achievement of athletes. From the perspective of popularity, the International Olympic Committee (IOC 2020) estimates that half the world's population will watch at least some coverage of the Games (for an international review, see Seippel 2019). Traditional values associated with the Olympics include respect, fairness, the pursuit of excellence, joy in effort, and the balance between mind and body. All of these factors, and present anti-doping efforts, indicate that there is room to dissolve the rigid dualism between elite and leisure sport, and it is possible to speak about an elite-sport-based concept of Sustainable Sport.

Surprisingly, few scholars have attempted to bring 'sustainability language' into the discussion about high-performance professional sport (Szathmári 2017; Barker et al. 2014). Scholarship exists about how sporting activities can contribute to peace (Azzarito and Ennis 2003), cultural diversity and tolerance (Barker et al. 2011; Dagkas, Benn, and Jawad 2011), social justice (Tinning 2002), social inclusion (Schailleé, Haudenhuyse, and Bradt 2019), and wellbeing

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<sup>4</sup> For a comprehensive review of potentially positive and negative societal impacts of elite sport, see De Rycke and De Bosscher (2019).

(Lundqvist and Sandin 2014; Silva, Monteiro, and Sobreiro 2019). Lawson (2005) specifically examined sustainability in professional sport, carefully distinguishing between leisure sport on the one hand and professional-Olympic (i.e. high performance) sport on the other. He asserted that the two are grounded in different philosophies, and maintained that sustainability is of little relevance to pro-Olympic sport, but may be entirely consistent with leisure sport.

For example, Lawson (2005) suggested that leisure sports: (1) may produce and reinforce social networks; (2) can contribute to the development of collective identities; (3) can improve human health; (4) may improve wellbeing; and, (5) may contribute to the development of human capital. However, there is little reason why professional sport cannot or should not make similar contributions to people's lives. In fact, there is evidence to suggest that it does do some of the things listed above (Pelak 2002; Agnew, Henderson, and Woods 2017).

The socio-economic perspective is that the purpose of Olympism is to 'place sport everywhere at the service of the harmonious development of man, with a view to encouraging the establishment of a peaceful society concerned with the preservation of human dignity' (IOC 1999). Further, to encourage new consumer habits in terms of playing an even more active role in maintaining health, to promote sports infrastructure which is even better adapted to social needs, and to further to increase the integration of development and environment concepts into sports policies (IOC 1999). The idea that sport is educational in a character-building or dispositional sense has a long history, reaching back at least to the time of early English public schools (Mangan 1981). Policymakers and practitioners have long advocated the educational potential of sport to facilitate the development of positive social values, life skills, and prosocial behavior amongst young people (Benson et al. 2012; Bailey 2006; Gould and Carson 2008; Kovacs and Doczi 2019).

According to the Olympic Movement's Agenda, sustainable development is only conceivable



if accompanied by the satisfaction of those cultural and material needs that are essential for all individuals to live with dignity and which play a positive role in the societies to which they belong (IOC 1999). Sport can help demonstrate how competitiveness and hard work can co-exist alongside honesty, fairness, solidarity, compassion, empathy, and grace. In fact, it is precisely because there is significant competition in elite sports (cf. Coakley 1994; Petroczi 2009; Vveinhardt, Fominiene, and Andriukaitiene 2019) that athletes are able to make a positive difference (Lawson 2005). This refers to the fact that strict dualism between elite and leisure sport (Table 1) should not be accepted from this perspective. In fact, the former and latter are rather poles of a theoretical continuum.

Therefore, any critique of (elite) sports may be considered a part of social critique. The individualism and competitiveness associated with sports are values that should be complemented with a focus on sharing and compassion. Thus the spirit of sport should focus on social and environmental sustainability and on social functioning based on peaceful and convivial, meaningful social cohabitation, and go beyond the underlying principles on which economic mechanisms involving productivism are based. According to Bayle (2016, 763), there appears to be one key scenario for the future to ‘commit to a strong local and global social strategy by using sport and Olympism to promote and encourage social innovations and thereby build a “better world.” Create a new utopia in order to use sport to help bring about economic, demographic, religious and geopolitical change in a multipolar and increasingly complex world.’

### 2.3 The systemic view of strong sustainability, leisure sport and elite sport within the spheres of nature, society, and economy

It is worth outlining a systemic view of sport, with leisure sport and elite sport as societal subsystems. Fig. 1 depicts the idea of strong sustainability (Daly 1996; Kerekes, Marjainé, and Kocsis 2018, 31–35) using concentric circles of nature–society–economy, where economy is

the innermost sphere. The economic logic of profit maximizing (efficiency and competitiveness measured quantitatively and mainly in monetary terms) dominates in the economic sphere, and every social issue *beyond* the economy serves as a key element of strong sustainability (see the shaded area in Fig. 1).<sup>5</sup>

However, in an environmentally unsustainable, growth-oriented system the economy logically embraces all the other spheres (weak sustainability): there is no place for the idea of strong sustainability; *uneconomic* social issues (Daly, 1999) are just ‘special cases’ associated with inefficiency, laziness, and waste (Kocsis and Szathmári 2020). As a working principle, it is today a revolutionary idea that society (and nature) is the enframing – and limiting – set of which economy (growth-based thinking) is just a subset. This model is related to Karl Polanyi’s ([1944] 2001) concept of embeddedness. Strong sustainability is a powerful response to The Great Transformation described by Polanyi, which can be regarded as the predecessor of The Great Acceleration by Steffen et al. (2015) that is now causing serious environmental damage on a global scale (see Steinberg 2019).

The focus of our analysis within the social area in this paper is sport. Sport today shows all the symptoms of a growth-oriented ‘economic society’, while characteristics of sustainability can also be identified, typically in ‘leisure sports’. We analyze sport here as a ‘mental code’ (or driving force) and not by its direct material impact in order to judge its environmental sustainability. Thus, our study is not a detailed analysis of the material flow of activities of sport clubs or the high level attendance of sports events, nor is it an analysis of the dependence on devices of different kinds of leisure sports (Kiss et al., 2016). Neither does it involve the calculation of the ecological footprint of moving huge masses of people under the

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<sup>5</sup> See also the concept of Degrowth (Kallis, Kerschner, and Martinez-Alier 2012; Liegey 2013; Harangozó, Csutora, and Kocsis 2018) which is able to actively engage with a wider community of alternative economic and social movements, thereby creating a new approach for social and economic institutions that helps bring into being a more equitable economic system in an environmental and social sense. It promotes conditions for existence that do not depend on constant material growth.

aegis of sporting activities or global-scale sports events (Mallen et al. 2010; McCullough, Pfahl, and Nguyen 2016; Trendafilova and McCullough 2018) – although all these phenomena could be important signs and consequences of unsustainable mindsets and working principles. Our study concerns the individual cognitive dimensions in relation to aims, future, and wellbeing, which is reflected by sport towards the whole of society. At this level of analysis, strong sustainability versus 'growth-oriented thinking' is the key distinction.

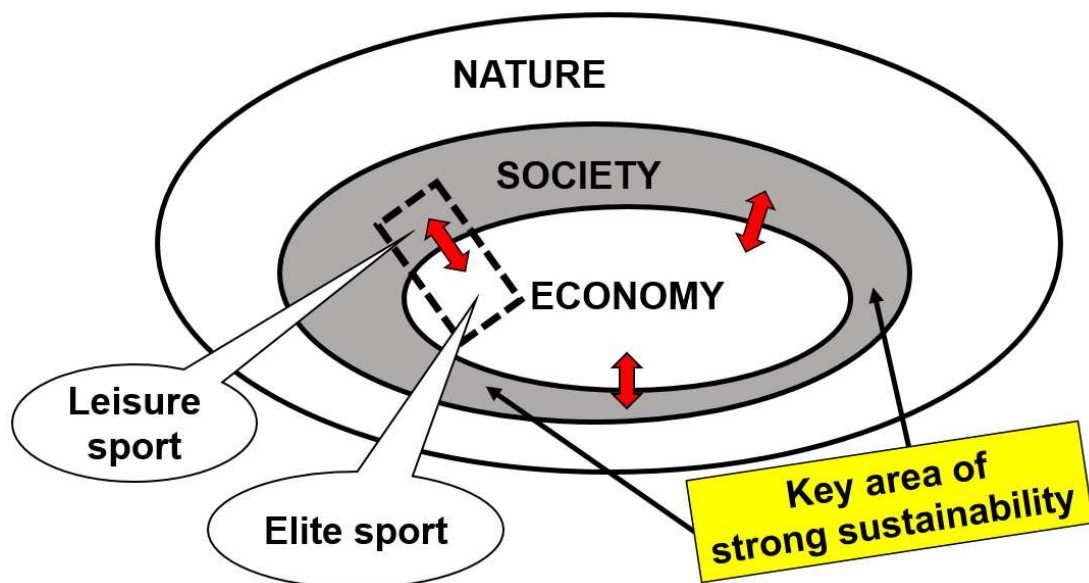


Fig 1. Systemic view of strong sustainability, elite sport, and leisure sport within the spheres of nature, society, and economy (based on an idea described in Kocsis and Szathmári 2020) (Notes: leisure sport and elite sport as societal subsystems are at the dynamic border of society and its subsystem of economy; arrows refer to economic growth/degrowth.)

The main question in our research is whether the concept of sustainability can be understood and cultivated within the area of elite sport (professional sport). Our results may have useful consequences in relation to more deeply understanding the significance of sustainability not just for retired top athletes nor for sport in general – but for a deeper understanding of broader areas of society beyond the sphere and logic of the economy (see the shaded area in Fig. 1).

### 3. Method and material

To identify problems with elite sport we first carried out qualitative research. Based on this, we created a questionnaire with 23 statements to quantitatively reveal patterns of problems and to quantify the related issues with the help of two sample groups of respondents: (i) sports-loving laypeople; and (ii) bachelor students in Hungary.

#### 3.1 Qualitative research: appraisals of elite sport

The basis and first step of our research involved interviews with professional Hungarian athletes.<sup>6</sup> We implemented one semi-structured interview with each participant. Semi-structured interviews were used because this method allows the researcher's questions to guide the interview process while simultaneously allowing topics identified by participants to be elaborated upon via probing (Rubin and Rubin 2012). Furthermore, with the use of non-numerical data this line of research helps explore and describe the 'quality' and 'nature' of how people behave, experience and understand in order to link people's actions to their beliefs (Brown 2004).

During the research process, we identified five elite athletes whose selection process may be considered homogeneous according to the criteria detailed below. One of the latter was the sport itself – namely, interviews were restricted to athletes who had competed in *individual* sports (e.g. swimming or athletics). This was necessary because, according to Baker, Yardley and Côte (2003), team sportsmen experience more intensively the effects of success / failure, expectations, and other psychological factors. An important criteria was the role of success: in terms of domestic success, all participants had won Hungarian championship titles, were internationally listed and acknowledged, and had successfully competed in the Olympics,

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<sup>6</sup> Hungary has a long and successful sporting tradition and is currently ranked second in terms of the Summer Olympic gold medals per capita table, and eighth in total, with 175 gold medals to date (see e.g. <http://www.medalspercapita.com> – accessed on 01/06/2020).

becoming internationally well-known athletes in the process. Our goal was to examine the thoughts of athletes who had experienced sporting success during their careers, thus the role of timing was deemed important: we interviewed only athletes whose professional careers had been over for at least five years, but who before that had a full sports-related career of more than a decade, so had good insight into this phase of their life involving sports.

The process of interviewing helped explore the awareness of the attitudes and perspectives of athletes towards elite sport, and related phenomena. Interviews were recorded in the autumn of 2015, each lasting between 45 and 60 minutes. Before the process, participants were informed about the purpose of the research, gave their informed consent, and sound recordings were made which were later destroyed. Recordings were transcribed and major verbal elements were labeled (such as laughter or longer silences) and jotted down.

Through the process of the analysis, while reading the interview transcripts several times (so-called immersion in the data), the researcher ‘imagines themselves as someone in another situation’ (Pietkiewicz and Smith 2014), and makes the transcript better by analyzing, explaining, interpreting, and conceptualizing through free content analysis (see Interpretative Phenomenological Analysis: Kassai, Pintér, and Rácz 2017; Smith, Flowers, and Larkin 2009). A total of 23 statements emerged (see Table 2) which provided the basis for the questionnaire used in our quantitative research.<sup>7</sup>

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<sup>7</sup> Cronbach’s Alpha of the 23-items is 0.656, which is acceptable (Vaske, Beaman, and Sporski 2017), especially regarding the exploratory nature of our research. However, we do not intend to handle these items as an intact scale for measuring Sustainable Sport, as this appears to be a multi-faceted phenomenon in itself. For further scale development, more research is needed.

| <b>LABEL</b>    | <b>STATEMENT</b>  |
|-----------------|---|
| LESS_UNEQUAL    | Elite sport plays an important role in reducing social inequality.  |
| CAREER          | Elite sport is one of the greatest career opportunities for young people.                                     |
| RESPECT         | Top athletes receive social respect through sport.  |
| LESS_CONFLICT   | Elite sport can help to reduce conflict between people.   |
| PROUD           | Hungarians can be proud of their achievements in sports.  |
| NAT_HAPPINESS   | Achievements in sport contribute to the nation's happiness and wellbeing.                                     |
| SPORTMANSHIP    | In elite sport, the principle of athleticism prevails within and outside the field.                           |
| USEFUL          | Doing elite sport is useful.  |
| LAB             | Things are going to be done in the laboratory [medical interventions/doping] rather than on the sports field. |
| MEDIA           | The media is more harmful to elite sport than supportive of it.   |
| ENTERTAINMENT   | The role of elite sport is entertainment.   |
| MONEY           | The role of money in elite sports has increased too much.   |
| BET             | It is good for elite sports that more and more types of betting are available.                                |
| DOPING_DANGER   | Prohibited performance enhancers (doping) endanger the fundamental values of elite sport.                     |
| BURNOUT         | Pressure to perform due to the limited length of athletes' careers leads to burnout.                          |
| EVERYEFF_REV    | It is good that elite athletes make every effort to achieve results. (Reverse coded!)                         |
| HEALTH          | Sports help keep elite athletes healthy.  |
| LIFELONGSUCCESS | An elite athlete can base their life around their sporting activity.  |
| GOODSITUATION   | The situation of Hungarian elite athletes is good.  |
| HEALTHDEMANDING | Sport places demands on the health of elite athletes.   |
| GOODCOMPETITION | Pressure to perform also brings out the best in elite athletes over the long term.                            |
| IDOL            | Elite athletes are role models for young people.  |
| MYCHILD         | I would like my child to be an elite athlete some time.   |

Table 2. The elite-sport-based Sustainable Sport questionnaire that emerged from interviews with Hungarian elite athletes

In this paper we discuss our quantitative findings based on this questionnaire in more detail.

For those interested in the qualitative details, see our manuscript (reference later).

### 3.2 Quantitative research: towards an elite-sport-based concept of Sustainable Sport

The basic purpose of the quantitative questionnaire survey was to map how people view elite

sport, including what elements it contains which may promote sustainability, and what the main values and dangers are that characterize (elite) sport. Our key analytical strategy was dimension reduction using multivariate statistical methods applied in IBM SPSS Statistics 25. For this we needed a sample with respondents sensitive to the topic. Thus, in our pilot study we deliberately biased sampling towards people with an interest in sports and students with an above-average environmental/sustainability consciousness.

The central element of our questionnaire was the 23 sports-related statements (Table 2). A total of 388 respondents completed the questionnaires,<sup>8</sup> which were implemented in two waves. The first wave was organized in January–February 2016 through a sports-related social media page (<https://eurosport.hosszabbitas.hu>) and the second through the first author’s personal social media site (reference later) (N=216; later referred to as the ‘mixed sample’). The second wave was implemented later (April–May 2016) at the University. Bachelor students who had chosen to study a basic, elective Environmental Economics course (N=150; later referred to as the ‘student sample’) were asked to participate in the research. The two samples are far from representative of Hungarian society, but the research was designed as a pilot project for revealing the structure of sports-related problems that prevail in society, thus we do not seek to extrapolate the findings to the whole of Hungarian society.

### 3.3 Material

The mean age of the student subsample was 20.4, and the mixed one 34.4. Thirty-nine percent of the students were male, while in the mixed sample the proportion was 63%, reflecting the gender ratio among bachelor students in economics and sports-loving individuals in general in Hungary (Table 6). The mixed sample is biased in terms of a higher level of education: most

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<sup>8</sup> Twenty-one respondents were younger than 14 years old, and one ‘strongly disagreed’ with every statement. They were all excluded. The numbers referred to later in this paper reflect the final sample number after filtering (N=366).

respondents had a master's degree, while all of the student sample had completed secondary school (they were completing their Bachelor's degree at the time of research). The type of settlement where respondents had spent their childhood was similar, with somewhat more respondents from a rural background (village) in the mixed sample. The sports-related experience of the two subsamples was almost exactly the same: 52% of respondents had at least an organized/*club-based* experience of sports, while others had experience with leisure sport (Table 5).

#### 4. Results

Despite the different characteristics of the two quantitative subsamples described above, we found no significant differences ( $p > 0.95$ ) in the means of answers to our elite-sport-based Sustainable Sport questionnaire (Table 2).<sup>9</sup> Thus we regard the whole sample as uniform for further analysis. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy (0.704) and Bartlett's test of sphericity ( $\chi^2 = 931.219$ ;  $p = .000$ ) indicated that there is room for dimension reduction in this sample. Thus, for the purpose of revealing and mapping the main structure of the items regarding elite sport, dimension reduction was undertaken. The analytical strategy for dimension reduction was as follows. In the first step (1), multidimensional scaling (MDS) was used to visualize the structure of items from our questionnaire. Then, (2) four-component principal component analysis (PCA) was performed to reveal the deeper structure of items and to understand the axes identified by using MDS.

For the two-dimensional solution of MDS, Young's S-stress formula was used with squared distances. The stress value was 0.167 which – according to Sturrock and Rocha (2000) – is adequate for 23 objects in two dimensions. From this phase of the analysis we constructed Figure 2, which served as a raw map of Sustainable Sport elements (without the sets of variables

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<sup>9</sup> The exact values of the means in each subsample can be seen in Table 6.



in this phase of the analysis).

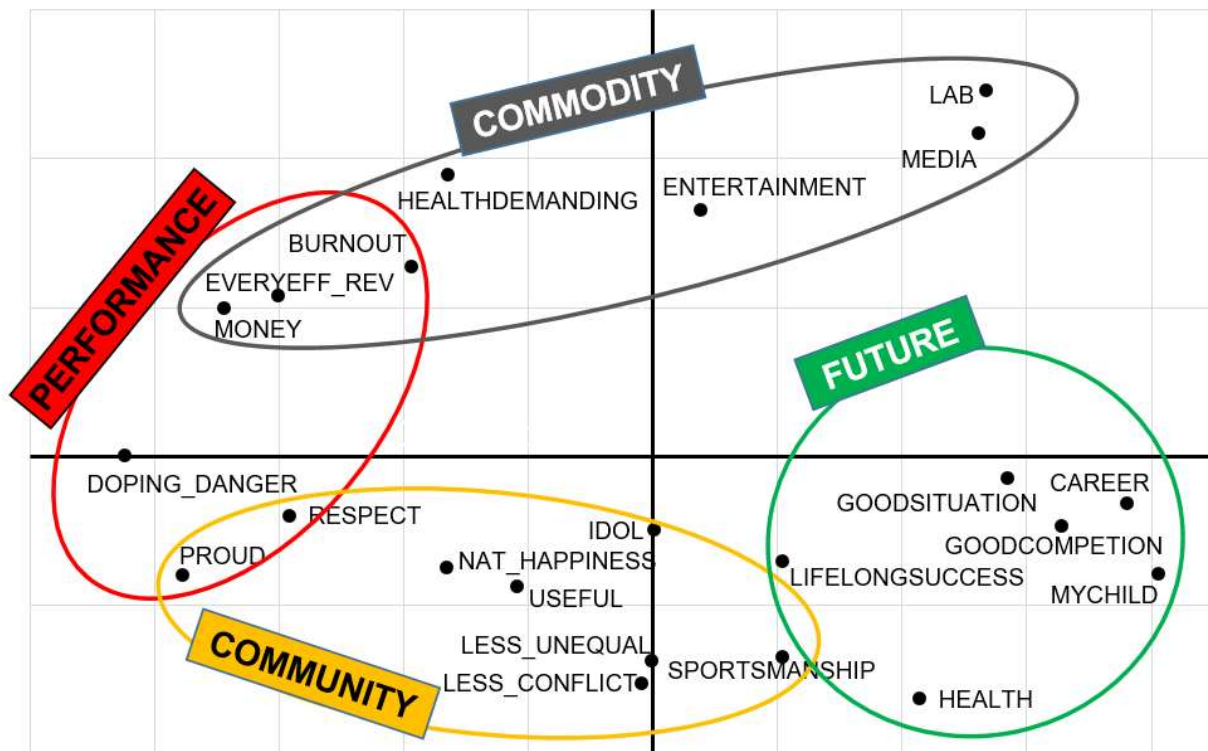


Figure 2: Map of elite-sport-based Sustainable Sport obtained from multidimensional scaling (MDS) and four-component principal component analysis (PCA) (For labels and statements, refer to Table 2)

After MDS, additional analysis was needed to make meaning of the axes and ‘clustering’ variables. Thus, four-component PCA was performed on our database. After varimax with Kaiser normalization rotation we obtained a model whose four components explained 40% of the total variance of the sample (Table 3). We deliberately used the four-component version of PCA as we wished to concentrate on the most important, definitive, four components of Sustainable Sport that are easily understandable from a two dimensional MDS-map.<sup>10</sup> Twenty-two statements from the twenty-three could be unambiguously paired with one of the four components (Table 4).<sup>11</sup> Rotation converged after six iterations.

<sup>10</sup> A classic PCA run produced an eight-component solution for our data, with all components having eigenvalues greater than one. These components explain 59.16% of the total variance of the sample.

<sup>11</sup> Only ‘Bet’ (see Table 2) could not be associated with any of the four components (each of the latter had some loadings for ‘Bet’, but none were of overriding importance). Thus ‘Bet’ was omitted and MDS and PCA were rerun with 22 statements. (All results are described according to this second analytical run.)

| Rotation Sums of Squared Loadings |       |               |              |
|-----------------------------------|-------|---------------|--------------|
| Component                         | Total | % of Variance | Cumulative % |
| (1) FUTURE                        | 2.747 | 12.484        | 12.484       |
| (2) COMMUNITY                     | 2.587 | 11.760        | 24.244       |
| (3) COMMODITY                     | 1.891 | 8.596         | 32.840       |
| (4) PERFORMANCE                   | 1.576 | 7.162         | 40.003       |

Table 3: Total variance explained after a four-component principal component analysis (Rotation method: varimax with Kaiser normalization)

Table 4 contains the rotated component matrix of elite sport statements. Information based on this PCA-based solution helped us to accomplish and structure the raw map of Sustainable Sport with sets of variables (Figure 2). This process also gave meaning to the emerging axes: PERFORMANCE and FUTURE are definitive for the horizontal axis, while COMMODITY and COMMUNITY are for the vertical one.

|                 | FUTURE | COMMUNITY | COMMODITY | PERFORMANCE |
|-----------------|--------|-----------|-----------|-------------|
| LIFELONGSUCCESS | 0.686  |           |           | 0.298       |
| CAREER          | 0.588  | 0.259     |           |             |
| HEALTH          | 0.582  |           |           |             |
| GOODSITUATION   | 0.569  |           |           | 0.357       |
| GOODCOMPETION   | 0.531  |           |           |             |
| MYCHILD         | 0.506  | 0.369     |           | -0.274      |
| ENTERTAINMENT   | 0.492  |           | 0.296     |             |
| LESS_UNEQUAL    |        | 0.625     |           |             |
| USEFUL          | 0.316  | 0.607     |           |             |
| NAT_HAPPINESS   |        | 0.605     |           |             |
| PROUD           |        | 0.531     |           | 0.449       |
| SPORTSMANSHIP   |        | 0.531     |           |             |
| LESS_CONFLICT   |        | 0.512     |           |             |
| IDOL            | 0.358  | 0.470     |           |             |
| LAB             |        |           | 0.658     |             |
| BURNOUT         |        |           | 0.617     | 0.293       |
| HEALTHDEMANDING | -0.357 |           | 0.562     |             |
| MONEY           |        |           | 0.548     |             |
| MEDIA           |        |           | 0.485     |             |
| RESPECT         |        | 0.251     |           | 0.543       |
| DOPING_DANGER   |        |           |           | 0.534       |
| EVERYEFF_REV    |        |           |           | 0.506       |

Table 4: Rotated component matrix of elite-sport-based Sustainable Sport questionnaire items (for the statements refer to Table 2) (Notes: components are FUTURE, COMMUNITY,

*COMMODITY and PERFORMANCE; values in grey italics concern connections between components; values of less than 0.25 were suppressed)*

## 5. Main components of Sustainable Sport

In our two-level empirical research, the four most important components related to the problems and circumstances of elite sport were identified. Each of these is described in brief below (based on Table 4 and Figure 2).

(1) **FUTURE**. According to the participants, elite sport can represent a good career opportunity and a means of lifelong success, and they can imagine their child being an elite athlete – as long as this helps maintain health (i.e. is not overly ‘healthdemanding’). Competition and pressure to perform are also thought to help to build a strong personality. ‘Entertainment’ has the least – albeit still significant – loading with **FUTURE** but also appears here: being able to entertain others appears to be important for sample respondents when the future of the individual is at stake. However, multidimensional scaling associates ‘entertainment’ rather with the **COMMODITY** component of the system (when using a two-dimensional solution to map the elements). Being an ‘idol’ is also somewhat important here.

(2) **COMMUNITY**. Sport can reduce conflict and social inequality between people, thereby contributing to national happiness. Elite athletes may be seen as role models and, in general, respondents are proud of their elite athletes and believe that professional sport is a useful activity. All these considerations highlight the community component of sport (career, respect and ‘mychild’ are also important components here).

(3) **COMMODITY**. This component indicates that laboratory tricks (doping) and the media are rather detrimental to the situation of sport. When sport is overly demanding with regard to the health of athletes it often leads to burnout. The role of money has increased too much – and not independently of the entertainment factor. As all of the statements were negatively/critically worded in relation to this component, we use the reverse of ‘commodity’ to define Sustainable

Sport: it is thus not surprising that COMMUNITY and COMMODITY are the components that are most different in the system. Thus, what is needed is rather *decommodification*, whereby money and substitutability are relegated to the background.

(4) PERFORMANCE. Performance and respect go hand in hand in the model. However, a redefinition of performance is needed: prohibited performance enhancement (doping) is dangerous to the fundamental values of elite sport and, according to respondents, it is NOT good that elite athletes make every effort to achieve results. (For this reason we reverse-coded the component labeled ‘everyeff’ as multidimensional scaling locates it in this component: ‘everyeff\_rev.’)

## 6. Conclusion and discussion

The study aim was to define the concept of sustainability in relation to one of the most competitive and accelerated subsystem of human activity, elite sport, to gain a robust understanding of it. In order to succeed, we analyzed what elite sport means to society and what effects it may have on general wellbeing and sustainability. During the qualitative part of the research, well-known Olympians and other elite athletes – the gladiators of our modern, accelerated era – gave us their thoughts about this topic in interviews. Following this (during the quantitative part of the research), others who love to watch sport or do it mainly in an organized/*club-based* form and sustainability-interested university students filled in our elite-sport-based Sustainable Sport questionnaire constructed using the former findings. From these samples a picture of elite sport emerged whereby the fundamental values and factors that endanger sport could be evaluated. Although elite athletes are seen as role models and receive appreciation from society for their successes and sport in general, and their activity was seen as helping to promote societal wellbeing, respondents also feel that the focus on results, other demands, doping, and betting can result in physical and mental health problems. Hence, in

general, respondents do not perceive that elite athletes are in a good situation (in Hungary), nor that sport is an ideal career path or one desirable for their children (see the negative means in Table 6).

We have mapped the views and values of individuals about elite sport to create an idealized picture of sport called Sustainable Sport. Based on principal component analysis, a four-component solution was elaborated. According to this explorative model, we constructed the concept of Sustainable Sport which reflects the problems of sport particularly, and (hypothetically) of society and the economy in general. Sustainable Sport (1) is *future-orientated* due to its focus on the treatment and education of upcoming generations through sport, and its creation of balanced careers with long-term opportunities for pursuing sporting aims and an environment in which humans can develop in the long term; (2) emphasizes *community* by concentrating on the cooperation, happiness, and sportsmanship that sport can bring to individuals and society; (3) focuses on *decommodification* by creating a healthy media–sports relationship that uses money as a tool but not an end in itself, and treat athletes less as objects and more as humans; and, consequently, (4) redefines *performance* by supporting the creation of future-orientation, community, and decommodification in the sense of winning respect.

Further research is needed to understand how sport can contribute to human wellbeing and how this can be institutionalized. Different social groups should be identified to more effectively target and promote the idea of Sustainable Sport. Professional athletes may be involved in further research to create a deeper understanding of what values sports represent for elite athletes, and how the latter can contribute to their mental and physical health and happiness. This paper may contribute as input for sport backcasting research (Király et al. 2013) in which the main goal is to identify whether elite sport can be envisioned as sustainable. What would the future of elite and leisure sport be in an era of Sustainable Sport?

Deeper quantitative analysis is also needed. It would be valuable to identify whether in different countries and cultures the same problem structure exists as we have identified in Hungary. How can wider society be structured along the elite-sport-based Sustainable Sport questionnaire (which should also be refined), and what types of clusters can be identified? What psychographic variables and economic situations significantly influence the responses? Answering these questions is important if we are to identify a path to a more sustainable society with more widespread wellbeing. The above-mentioned factors are also the limits of this research. Our definition of Sustainable Sport is based on a limited, medium-large (N=366) Hungarian sample which should be extended in terms of both quantity and quality (e.g. by addressing a broader strata of society and/or members of different cultures).

The elite-sport-based concept of Sustainable Sport elaborated in this paper is neither directed at elite nor leisure versions of sport. However, as the concept was built on elite sport (one of the most competitive and accelerated subsystems of human activity), we believe that we have obtained a robust understanding of (social) sustainability. This promotes the idea that all forms of physical activity within the frame of sport should be *sustainable*: that is, more future oriented and community supporting, and less commodified. Of course, these characteristics should also orientate human activity in general. This should lead to different ideas about performance and its measurement. Bans on doping and the debate surrounding human genetic enhancement are clear signs that people think there must be some limits to *citius, altius, fortius* (faster, higher, stronger). Sustainable Sport may help to promote individual and social wellbeing and – by reducing dependence on material resources – may also represent a tool for fostering environmental sustainability.

The question is whether strong sustainability is a viable goal in relation to sufficiency, nonmonetary forms of measurement, and economic degrowth in general. It would be a good idea to undertake related experimental projects on smaller scale human activities such as sport.

If this idea works in relation to the theoretical ‘leisure sport – elite sport’ continuum (by impregnating elite sport with leisure-type characteristics more intensively), then this approach might be applicable to other segments of society, too. Elite sport, then, would less represent a market for economic transactions involving the exchange of huge amounts of money for people able to produce exceptional performances, but rather become a source of admiration in its classic sense, and an example to follow for future generations in relation to build a sustainable and livable future. However, from a managerial – or less optimistic – point of view, and as a minimum target, if an elite-sport-based concept of Sustainable Sport is able to stop the further commodification of leisure sport by better balancing the ‘social’ and the ‘economic’ and planting seeds of sustainability for the future, it still could be evaluated as a success. Gladiators of business may also find some rest.

## Acknowledgements

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## Appendix

Table 5: Characteristic of the two subsamples (mixed and student) according to education, childhood settlement, and experience with sports

|                  |                        | SAMPLE          |         | Total  |       |
|------------------|------------------------|-----------------|---------|--------|-------|
|                  |                        | mixed           | student |        |       |
| EDUCATION        | Primary                | Count           | 25      | 0      | 25    |
|                  |                        | % within sample | 11,6%   | 0,0%   | 6,8%  |
|                  | Secondary              | Count           | 40      | 150    | 190   |
|                  |                        | % within sample | 18,5%   | 100,0% | 51,9% |
|                  | Bachelor               | Count           | 56      | 0      | 56    |
|                  |                        | % within sample | 25,9%   | 0,0%   | 15,3% |
|                  | Masters                | Count           | 82      | 0      | 82    |
|                  |                        | % within sample | 38,0%   | 0,0%   | 22,4% |
|                  | PhD                    | Count           | 13      | 0      | 13    |
|                  |                        | % within sample | 6,0%    | 0,0%   | 3,6%  |
| Total            | Count                  | 216             | 150     | 366    |       |
|                  | % within sample        | 100,0%          | 100,0%  | 100,0% |       |
| CHILDHOOD        | Capital                | Count           | 50      | 43     | 93    |
|                  |                        | % within sample | 23,1%   | 28,7%  | 25,4% |
|                  | City                   | Count           | 44      | 36     | 80    |
|                  |                        | % within sample | 20,4%   | 24,0%  | 21,9% |
|                  | Town                   | Count           | 55      | 46     | 101   |
|                  |                        | % within sample | 25,5%   | 30,7%  | 27,6% |
|                  | Village                | Count           | 63      | 21     | 84    |
|                  |                        | % within sample | 29,2%   | 14,0%  | 23,0% |
|                  | Abroad                 | Count           | 3       | 3      | 6     |
|                  |                        | % within sample | 1,4%    | 2,0%   | 1,6%  |
| n.a.             | Count                  | 1               | 1       | 2      |       |
|                  | % within sample        | 0,5%            | 0,7%    | 0,5%   |       |
| Total            | Count                  | 216             | 150     | 366    |       |
|                  | % within sample        | 100,0%          | 100,0%  | 100,0% |       |
| SPORT EXPERIENCE | Leisure                | Count           | 101     | 70     | 171   |
|                  |                        | % within sample | 46,8%   | 46,7%  | 46,7% |
|                  | Organized / club based | Count           | 111     | 79     | 190   |
|                  |                        | % within sample | 51,4%   | 52,7%  | 51,9% |
|                  | n.a.                   | Count           | 4       | 1      | 5     |
| % within sample  |                        | 1,9%            | 0,7%    | 1,4%   |       |
| Total            | Count                  | 216             | 150     | 366    |       |
|                  | % within sample        | 100,0%          | 100,0%  | 100,0% |       |

Table 6: Characteristics of the two subsamples (mixed and student) according to gender, age, and position in relation to the 23 statements about elite sport (*Note: Statement variables were measured using a four-item scale: -2, -1 correspond to disagreement; +1, +2 to agreement*)



|      |                | N   | Mean  | Std. Deviation | Std. Error Mean |
|------|----------------|-----|-------|----------------|-----------------|
| MALE | mixed sample   | 216 | 63%   | -              | -               |
|      | student sample | 150 | 39%   | -              | -               |
| AGE  | mixed sample   | 212 | 34.38 | 14.74          | 1.01            |
|      | student sample | 150 | 20.39 | 1.73           | 0.14            |

|                 |                |     |       |      |      |
|-----------------|----------------|-----|-------|------|------|
| LESS_UNEQUAL    | mixed sample   | 206 | 0.13  | 1.42 | 0.10 |
|                 | student sample | 139 | 0.12  | 1.32 | 0.11 |
| CAREER          | mixed sample   | 209 | -0.60 | 1.30 | 0.09 |
|                 | student sample | 149 | -0.93 | 1.14 | 0.09 |
| RESPECT         | mixed sample   | 211 | 1.32  | 0.86 | 0.06 |
|                 | student sample | 148 | 1.33  | 0.77 | 0.06 |
| LESS_CONFLICT   | mixed sample   | 210 | 0.21  | 1.51 | 0.10 |
|                 | student sample | 146 | -0.04 | 1.31 | 0.11 |
| PROUD           | mixed sample   | 211 | 1.46  | 0.97 | 0.07 |
|                 | student sample | 148 | 1.47  | 0.81 | 0.07 |
| NAT_HAPPINESS   | mixed sample   | 212 | 0.65  | 1.33 | 0.09 |
|                 | student sample | 148 | 0.86  | 1.22 | 0.10 |
| SPORTMANSHIP    | mixed sample   | 206 | -0.10 | 1.44 | 0.10 |
|                 | student sample | 146 | 0.12  | 1.21 | 0.10 |
| USEFUL          | mixed sample   | 209 | 0.65  | 1.34 | 0.09 |
|                 | student sample | 148 | 0.93  | 0.99 | 0.08 |
| LAB             | mixed sample   | 197 | -0.36 | 1.29 | 0.09 |
|                 | student sample | 140 | -0.69 | 1.20 | 0.10 |
| MEDIA           | mixed sample   | 200 | -0.31 | 1.39 | 0.10 |
|                 | student sample | 139 | -0.50 | 1.28 | 0.11 |
| ENTERTAINMENT   | mixed sample   | 210 | 0.47  | 1.32 | 0.09 |
|                 | student sample | 146 | -0.02 | 1.28 | 0.11 |
| MONEY           | mixed sample   | 212 | 1.48  | 0.91 | 0.06 |
|                 | student sample | 143 | 1.20  | 0.98 | 0.08 |
| BET             | mixed sample   | 187 | -1.03 | 1.23 | 0.09 |
|                 | student sample | 125 | -0.78 | 1.15 | 0.10 |
| DOPING_DANGER   | mixed sample   | 212 | 1.50  | 1.06 | 0.07 |
|                 | student sample | 149 | 1.46  | 1.07 | 0.09 |
| BURNOUT         | mixed sample   | 203 | 0.91  | 1.07 | 0.08 |
|                 | student sample | 141 | 0.93  | 1.00 | 0.08 |
| EVERYEFFORT     | mixed sample   | 214 | -1.16 | 1.20 | 0.08 |
|                 | student sample | 145 | -1.03 | 1.11 | 0.09 |
| HEALTH          | mixed sample   | 214 | -0.30 | 1.49 | 0.10 |
|                 | student sample | 149 | 0.00  | 1.28 | 0.10 |
| LIFELONGSUCCESS | mixed sample   | 207 | 0.25  | 1.40 | 0.10 |
|                 | student sample | 146 | -0.25 | 1.38 | 0.11 |
| GOODSITUATION   | mixed sample   | 193 | -0.49 | 1.37 | 0.10 |
|                 | student sample | 128 | -0.52 | 1.21 | 0.11 |
| HEALTHDEMANDING | mixed sample   | 210 | 0.73  | 1.19 | 0.08 |
|                 | student sample | 146 | 0.54  | 1.22 | 0.10 |
| GOODCOMPETITION | mixed sample   | 206 | -0.42 | 1.31 | 0.09 |
|                 | student sample | 145 | -0.54 | 1.19 | 0.10 |
| IDOL            | mixed sample   | 211 | 0.41  | 1.29 | 0.09 |
|                 | student sample | 143 | -0.06 | 1.21 | 0.10 |
| MYCHILD         | mixed sample   | 189 | -0.61 | 1.42 | 0.10 |
|                 | student sample | 134 | -0.89 | 1.21 | 0.10 |

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## 8. Appendix III

### 7.1 'I wouldn't do anything differently ... although I won't let my child go in that direction': Successful Hungarian Olympians' understandings and experiences at the close of elite sport careers.<sup>12</sup>

Whilst the relationship between sport-related success and its effect on the identity of athletes has been acknowledged, less attention has been paid to understanding this relationship from the perspective of the individual. Elite sport follows the logic of individualism, competitiveness, and productivity, while elite athlete performance is depicted as being a remedy for society's ills by empowering control over health and serving as a good example for future generations. This dualism is reflected in the viewpoints of elite athletes: in their experiences, reflections, and memories. The aim of this paper is to formally examine through Hungarian elite athletes' experiences how elite sport is related to components of the athletic identity and their potential impact on individual sustainability. Results show (1) how essential the role of coaching is in elite athletes' careers, (2) how sport is seen as a protective shield, indicating the importance of life-long career planning, and (3) that there is cognitive dissonance regarding the identity of elite athletes.

Keywords: elite athletes, identity, individual sustainability, phenomenology, sport

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<sup>12</sup> Attila Szathmári: 'I wouldn't do anything differently ... although I don't let my child go in that direction': Successful Hungarian Olympians' understandings and experiences at the close of elite sport careers. (Vezetéstudomány - Budapest Management Review)



## Introduction

A growing body of research has shown that elite athletes – i.e. those seen as successful by society – experience their careers differently as individuals. There is academic agreement that elite sport is a risky profession. The competitive logic that drives athletes to continuously aspire for high-level performance is associated with risk-taking and a disregard for health and well-being (Overbye, 2018).

This dualism has existed since elite sports became a business – a fairly recent phenomenon compared to the development of the rest of the economy, since sports professionalism and its commercialization only started within the last four decades (András, 2003; András et al., 2019; Dénes & Misovitz, 1994; Szathmári & Kocsis, 2020). The logic of elite sport is characteristic of the capitalist society that created it. Elite sport is the product of a growth-based society (Harangozó, Csutora & Kocsis, 2018; Kerekes, Marjainé & Kocsis, 2018; Kocsis, 2018), with its attendant subsystem and ideological support. Organized according to the logic of productivity, efficiency, evaluation, comparison, hierarchy, etc., elite sport reflects the conditions of society and makes its pitfalls even more visible (Liegey, Madelaine, Ondet & Veillot, 2013).

Due to its system logic and risky consequences, some sports scientists have turned to identity-related concepts to challenge this dualism and elaborate whether and how elite sport might be individually sustainable (Dohlsten, Barker-Ruchti & Lindgren, 2020). Sustainability can mean various things, and individuals may weigh different aspects of the latter concept in slightly different ways (Király et al., 2013). Researchers have claimed that it is rather complex and difficult for sport to meet the requirements of sustainability, as this would involve athletes, coaches, associations, organizers of sporting events, decision makers, representatives of the economic ecosystem, and sports-related social organizations, too – insofar as sustainability is based on long-term thinking and forward planning, and a rejection of short-term alternatives in order to achieve long-term goals (Dingle & Mallen, 2020). This means, on the one hand, promoting the ecological aspects of sustainability – making sports green –, as well as fostering economic sustainability, legacy and profitability (Preuss, 2019). Last but not least, continuity in sports in the form of youth education and career planning could be also a part of this (Bohó et al., 2015; Szathmári, 2017). Yarmoliuk (2019) differentiated between environmental, social, and economic aspects in decision-making processes concerning sports sustainability. Researchers suggest that sustainability represents “a condition or set of conditions whereby human and natural systems can continue indefinitely in a state of mutual well-being, security, and survival” (Jones, Selby & Sterling, 2010, p. 19).

While security and survival have become increasingly important topics for humankind, surprisingly few researchers have so far tried to build a concept of individual sustainability around elite sports. Lindsey (2008) defines individual sustainability as a longer-term shift in personal identity, ability, and/or attitude through development in relation to participation in sports. Loland (2006) emphasizes the relevance of human-centered perspectives and conducting elite sports in a way that can increase mutual well-being and respect. Kim et al., (2019) argue that we should create positive organizational practices to ensure the mental health of sports-related employees.

Earlier research focused on the psychological aspects of sport. In terms of the early burnout of athletes, Coakley (1992) examined whether we should talk about a social problem or individual mistakes. Finally, it has come to light that there is a flaw in social organizations, and their transformation is inevitable. Athletes' difficulty in bringing professional careers to a close has also emerged as an issue. In terms of success, Fletcher and Sarkar (2012) and Lundqvist (2011) analyzed the stress tolerance of Olympic champions in terms of individual sustainability.

While the researchers suggest that the demands and resources of careers in elite sport limit their career sustainability as elite athletes, they also reveal that a short-term career in sport does not prevent longer-term sustainability in other sphere. An increasing number of jobs/careers are becoming unsustainable due to high employer- and contextual demands, occupational stress, burnout, and lack of work-life balance (Richardson & McKenna, 2020). The physical, psychological, and emotional demands of a career in elite sport often end in burnout and chronic levels of stress and injury that lead to the end of athletes' careers (Thelwell, Weston & Greenless, 2007). This claim also supports those of other scholars who have argued that whereas some demands can be challenging, they are not inherently detrimental to work experience and to achieving short- and long-term goals and developing individual sustainability (Crawford, LePine & Rich, 2010). Richardson and McKenna (2020) argue that, although the demand for a high level of performance may limit individual sustainability in elite sport, this should not be inherently problematic and may be something that can be "managed away." However, doing so may negatively impact athletes' motivation to participate, and hence subsequent performance.

In our exposition, individual sustainability is revealed by a focus on athletes as human beings and on personal needs. These traits allude to elite sport stakeholders' interest in building trust, honor, and diversity, which elements may make elite sports more sustainable (Annerstedt & Lindgren, 2014; Barker-Ruchti, Rynne, Lee & Barker, 2014; Szathmári, 2017). Lawson (2005) meticulously researched the relationship between sustainability and elite sport and concluded

that elite sport's sustainability – due to its inherent logic – is fragile. This fragility is closely connected to the identity formation of athletes. Athletes who can restructure and preserve their identities prior to finishing their athletic careers might be better able to cope with the loss of the latter than those who maintain a strong commitment to their identities as athletes until their careers end, or even subsequently. It may be that those athletes who engage in self-preservation by controlling their investment into their athletic identity are also those who can more effectively steer their career transitions (Lally, 2007).

Athletes' identities incorporate the cognitive, affective, behavioral, and social aspects associated with their roles (Brewer, Van Raalte & Linder, 1993). "Like all role identities, an athlete's identity is developed through the process of constructing and interpreting meanings within various social interactions. In this sense, athletes use socially constructed norms, values and beliefs associated with the sporting role to help understand the world around them" (Ryan, 2018, p. 1). Thus, understanding the identity component of athletes is a vital task when investigating the experiences of athletes, and research into identity in relation to individual sustainability in elite sport may offer insight into this specific parameter (Cosh, LeCouteur, Crabb & Kettler, 2013).

While an individual's identity can consist of various dimensions, it is probable that one of these will become a dominant lens through which the others are viewed (Lally, 2007). Ideas about identity formation can thus contribute to understanding how sustainable elite sport can be expanded. Thus, the aim of this paper is to reveal athletes' needs and concerns regarding sustainable elite sport. Specifically, we aim to answer the following research question: What aspects of identity-construction influence the identities and individual sustainability of elite athletes? We try to elaborate how the sample athletes make sense of their elite sports careers, including what they see as important factors in relation to their success, and what they see as problems. In this sense, we seek to understand individual sustainability in sports as the product of the correspondence between the demands of an elite sport system and the individual athlete's personal needs and potential (Schubring & Thiel, 2014).

## **Materials and methods**

### **Procedure**

The purpose of our research was to understand which elements of the non-growth paradigm in sport can be nudged to make sport a more sustainable economic activity. The basis is in-depth interviews with elite athletes that were examined using interpretative phenomenological analysis (IPA). (We also created a questionnaire with 23 statements to quantitatively reveal and help understand related issues with the help of sample groups in Hungary (Szathmári & Kocsis, 2020)). IPA is a qualitative research method that is increasingly used, primarily in psychology. The basics of IPA are related to phenomenology and hermeneutics, which emphasize that individuals' experiences can only be interpreted in context. The IPA-based approach allows the researcher to view a specific experience from an "insider perspective," treating the researcher as an expert. The method seeks to identify and understand the experience as much as possible, and to understand how the person involved in the study interpreted it (Gelei, 2006; Kassai, Pintér & Rácz, 2017). The aim of IPA research is thus to explore personal, lived experiences with phenomena, such as – in our case – athletes' career experiences (Smith, 2011). Qualitative research can help with understanding customers' / consumers' experiences and evaluations of a particular service (Fett, Bruns & Lischka-Wittmann, 2009; Mitev, 2012). IPA is, therefore, an interpretative, hermeneutical method that can appear at several levels in the research process.

### **Participants**

Targeted sampling was used. The five athletes we interviewed gave us access to a specific phenomenon that represented a "perspective" rather than a population. Following the recommendations of Smith et al. (2009), a state of homogeneity can be identified. Regarding the experiences of athletes, homogeneity should be present in the sense of the athlete's basic experiences and transitions, and the time spent on professional sporting activities. Accordingly, the main characteristics of the sample members' sporting experiences were similar in terms of individual/team sports, popularity, domestic/international success, Olympic embeddedness, supporting system, and in how much time they had been inactive at the time of the interview. During the interview lead-up process, we identified five professional athletes whose selection process we considered homogeneous according to the criteria detailed below. One of the criteria was the sport itself – namely, interviews were restricted to athletes who had competed in individual sports (e.g. swimming or athletics). This was necessary because, according to Baker,

Yardley and Coté (2003), team sportsmen's experiences apparently differ in terms of the effects of success/failure, expectations, and other psychological factors.

Another important criterion is the outcome of professional careers: in terms of measurement, our athletes had been awarded national championship titles, were internationally ranked, had participated in the Olympics, and can be identified as elite athletes. Also, the role of the time-horizon was considered an important criterion: we included athletes whose professional careers had finished some years ago, but who had formerly competed for more than a decade, so they had a reasonable distance from and some insight into this phase of their lives. The former professional athletes had not entirely ended their sport-related activities; in some form, they were still connected with the system. Based on their own experiences, Larkin, Eatough and Osborn (2011) suggest using a sample of three to six people. This is suitable for describing similarities and differences between individual cases.

Sample selection was based on Miles and Hubermann's (1994) classification that employs intensity-based criteria and comparable sampling techniques. The essence of the former is investigating information-rich cases. The research question is always open, is focused on exploration (not explanation), on process (not result), and aims at reporting (not identifying causes or consequences). The research question should also involve a special context (not, for example, a comparison of contexts). At the beginning of the research, we formulated a two-level research question (a first-level research question was followed by a second-level research question that could be theoretically grounded) (Somogyi et al., 2018). Our main research question was "What aspects of identity-construction influence the identities and individual sustainability of elite athletes?"

Contact was based on pre-established relationships. This ensured that all the above-mentioned "intensity criteria" were met. Interviews were documented in a friendly environment known to the athletes. This prior contact ensured an open and frank atmosphere, and increased the chance that subjects could boldly express themselves.

### Data collection

We implemented a semi-structured interview with each participant. Semi-structured interviews were used because the method permits the researcher's questions to guide the interview process while simultaneously allowing topics identified by the participants to be elaborated upon via probing (Rubin & Rubin, 2012). Furthermore, with the use of non-numerical data this line of research helps explore and describe the "quality" and "nature" of how people behave, experience, and understand, and thus helps link people's actions to their beliefs (Brown, 2005).

A semi-structured interview process was applied that incorporated the results of former questionnaire survey. Inquiring about the phenomenon we wanted to investigate (including experiences of injury, failure, or success) during the interviews allowed the identity of the interviewees to be evaluated in the context of the given experience.

Interviews were documented in 2015, each lasting between 60 and 90 minutes. Prior to these, participants were oriented about the object of the research and gave their informed consent. Recordings were made which were later destroyed. Documentation were transcribed and major nuncupative elements were labelled (such as chuckling and meaningful silences) and noted down.

### Data analysis

In perusing the interview transcripts – so-called immersion in the data – the researcher “takes on the interviewee's viewpoint” (Pietkiewicz & Smith, 2014) and makes the transcript better through analysing, explaining, interpreting and conceptualizing using free content analysis (Smith, Flowers & Larkin, 2009). Conceptual commentary is “torn” from the direct text and is utilized to originate an understanding of the person on a more holistic level. It is characterized by the entire dialogue: the “dialogue” between the preliminary knowledge of the researcher, and an ongoing understanding of the interviewee's experiences.

The next step was the creation of emerging themes (Pietkiewicz & Smith, 2014) by exploring all the interviews from a different perspective to that of the participants. In this, more emphasis was placed on the researcher's organizing and interpretative role. While creating a “new body” of outcomes, the themes continuously develop. A topic may become an emerging issue when it arises in at least half of the interviews (Smith, Flowers & Larkin, 2009), and these topics should be written down in the transcript. In implementing this method, the researcher can incorporate psychological constructs into the process of interpretation.

## Results

In the following sections, we explore the narrative types associated with identity construction through the selection of the latter experiences. Comparing the situation of athletes in sport to the situation with the environment, and examining the boundaries thereof, we must then look at what is socially desirable. Efficiency gains in the short term – or performance-related results in Hungarian sports – may not support human individual sustainability in the long term. In addition to physical and psychological factors, sport is also part of the human environment.

Coding of the first interview indicated that emotional affection was emphasized – athletes talked about coaches, parents, and age groups using several motifs (“desire,” “love,” “shield”) that were analogous to the terms used in a relationship. Mention of these relationships occurred frequently in all interviews, so they may be considered distinct topics. Experience related to the attitude to training and fierce competition was also crucial.

|   |   |   |
|---|---|---|
| <b>PARENTS' ROLE</b><br>you are your own person<br>there is no fight<br>family pressure --> study   | <b>DESIRE</b><br>sport as love<br>coaching for love --> crazy<br>easier way vs. learning                              | <b>MENTAL/PHYSICAL HEALTH</b><br>always pain<br>coach physical --> psychologist mental<br>enormous load --> hit back  |
| <b>TRAINING</b><br>monotonous, hideous<br>playfulness <--> get results<br>no training --> still success   | <b>COACHES' ROLE</b><br>luck, responsibility<br>no private life - after own's head<br>no killing-noticed-was built up | <b>ABROAD</b><br>horizon<br>scholarships<br>money, better facilities  |
| <b>COMPETITION</b><br>injustice<br>happiness<br>eternal pain  | <b>VISION</b><br>sport as protective cover<br>closed world: grime ---> cleaner, easier<br>black hole, vacuum          | <b>AGE GROUP RELATION</b><br>trust only yourself <--> society<br>embarassing not to study<br>marriage, children later |
| <b>IDENTITY: WHO HAVE I BECOME?</b><br>never give up<br>tomorrow will be better<br>start at the bottom<br>role model, positive personality traits |   |   |

Figure 1. Exploratory themes that emerged during the coding process

Thereafter, we sought to identify the connections (such as chronological links) between the emerging themes and those overarching topics that could cover several subtopics. By using quotes from the interview transcripts and trying to reveal the patterns and groups of topics among the interviews, further interpretation of unfolding themes – called “master themes” – can be developed (Smith, Flowers & Larkin, 2009). During the analysis, the researcher interprets how the interviewee has interpreted their experience; this dual interpretation is a process of “double interpretation” wherein the second, scientifically and systematically performed interpretative work of the researcher can be considered a part of the reflective phenomenological attitude of IPA – as opposed to interviewees “naturally adjusted” pre-reflective observations, using Husserl's expressions (Smith et. al. 2009).

## Primary and secondary themes

| Role of coaching  |   | Protective cover   |   | Social connectedness  |   |
|---|---|--|---|---|---|
| Gains   | Lack of...  | Age-group  | Problems  | Cognitive dissonance  | Child-like values   |
| Appreciation, relationship, coach, emotions, love   | Concept, working system, lifelong program, human focus, appreciation, long-term perspective           | Privileges, comparison, exit, integration, otherness   | Mentality, health, age group, human relationships, transition   | Belief, values  | Motif, playfulness  |
| <i>It was the expectation of the [trainers at the] swimming pool that educational studies would continue.</i> | <i>...these days people - who do something terrible, worthless - gets into the focus of society.'</i> | <i>'Those of my age group got married earlier and had babies earlier. There is no healthy golden mean, only extremes.'</i>                                       | <i>Ask anyone at the top! Sport is not healthy anymore.'</i>  | <i>'I wouldn't do anything differently ... although I won't let my child go in that direction.'</i>   | <i>'[Participating in the] Sydney [Olympics] was like taking a kid to the amusement park.'</i>                          |
| <i>...results must be produced at all cost for coaches so that they can prove their existence.'</i>           | <i>To offer alternatives and not to let go of one's hands when they quit.'</i>                        | <i>Everyone loves athletes. Especially if you are successful. In life, you can never normally do something that everyone unconditionally accepts and loves.'</i> | <i>I can understand the people who - it will sound rude - jump out the window to finish their participation in athletics or any sport.'</i> | <i>After retirement, it was complicated for me, and it was a severe problem that time was running out of my hands, days and hours, deadlines of all kinds.'</i> | <i>Little ones should be playful. This is the biggest mistake in relation to performance constraints.'</i>              |
| <i>...he did not burn me out in the drive to be successful; I was systematically built up to be good.'</i>    | <i>'Only the very crazy stay there for that minimal amount of money, doing it with love.'</i>         | <i>'I went around the world because of my running and jumping.'</i>  | <i>It was a space: a vacuum and I felt that I couldn't find my place in my age group.'</i>  | <i>I think the most serious problem is that an athlete counts as long as he/she is active.'</i>   | <i>...hold hands for a few years and be by her side as she becomes independent and switches over to everyday life.'</i> |

Figure 2. primary and secondary themes identified and unfolded during the IPA process

The indicative identity of athletes was constructed within a performance-based narrative plot. By exploring the identity-construction aspects of elite athletes in the re-readings and rearrangements of the text, stories emerged around three unfolding themes: the **(a)** “*central role of coaching*” during the careers of elite athletes; elite sport reflected as a **(b)** “*protective cover*”; and **(c)** “*social connectedness*” related to identity development.



(a) *The “central role of coaching.”* Closely associated with other emerging themes (parents, training, competition, and desire). The role of coaches (as part of a supporting system) is remarkable in terms of the original discovery of the athletes (*“seeing something in me”*), managing them properly (*“not killing me”*) and long-term planning (*“built up”*). We identified motifs associated with long-term planning (athlete-coach-sport), athletes who face *“burn-out,”* and other factors. “I was lucky with my coach as he did not burn me out in the drive to be successful; I was systematically built up to be good.” The coaches’ role emerged as vital in shaping the athlete’s identity and creating the chance for an individually harmonious career: “I think the most serious problem is that an athlete counts as long as they are active. While an athlete is in this phase of their life, they should be prepared for the next period.” A lack of the elements of long-term planning, a human-centered approach, and a life-long program may be components of an elite sport system, and a missing part of the individual athlete’s personal needs, and have potentially negative effects on individual sustainability:

...results must be produced at all costs for coaches, so that they can prove their worth, and, as a result, a child can be burned out or unmotivated by the age of 15. Little ones should be playful. This is the biggest mistake in relation to performance constraints.

(b) *“protective cover.”* The role of contradictions, such as the comparison of the internal / external world and active / formerly active athletes, is essential in identity construction. “Everyone loves athletes. Especially if you are successful. In life, you can never normally do something that everyone unconditionally accepts and loves.” An individual’s identity can consist of various dimensions, while the existence of a “protective cover” is identified as a dominant lens through which “the outside world” is viewed. Sport is like a small world surrounded by a protective sheath that separates and protects athletes, yet making it extremely difficult to quit. A *“closed world”* that *“itself is dirty, but still simpler, cleaner (!) and not as infected as the outside world.”* Age as a sub-theme also forms the basis of continuous comparison in relation to social status, becoming a substantial part of subjective social self-image.

I have a very tight agenda as an athlete, so my days are tied to a schedule. After retirement, it was complicated for me, and it was a severe problem that time was running out of my hands, days and hours, deadlines of all kinds. At that time, I was much more disciplined, plus at our pool it was crazy not to learn well.

Constant comparison was also related to raising awareness about what sport (“*worldview*” sub-theme) could give athletes in return. A “*black hole*” or “*vacuum*” may arise after emerging from under the protective cover of a life in sports. Athletes who can restructure and preserve their identities prior to finishing their athletic careers might be better able to cope with such losses. Accordingly, restructuring and preserving their identities prior to finishing their athletic careers might help them to cope with the experience of loss:

I can understand people who – this will sound rude – jump out of the window to finish their participation in athletics or any sport. Well, it is a very, very terrible feeling. I have not gotten that far, thank God, but maybe because I am a tougher breed. But it has also occurred to me, I’ve thought: ‘what the hell I am looking for in this world? I am not good at anything!’ And from this point on, you feel useless, there is none of the confirmation you get from sport, and you cannot find it anywhere else, because to find it... you have worked 150% so far, and now there is a world in which every normal person who has been with you for 15 years has already taken these steps.

Here, security is considered key in terms of to what extent it is available to athletes. Personal security comes under threat during transition periods (starting and finishing a career, turning professional etc.) so a systematic approach that can protect oneself becomes essential.

Continuing in education, thereby increasing the chance of developing a dual career, was an expectation of parents which later became standard at sports clubs, but was not part of long-term planning:

It was the expectation of the [trainers at the] swimming pool that educational studies would continue. They knew that a lot of parents would take their children out if they did not learn well, so it was in the pool’s interest that they studied. And the two don’t rule each other out.

(c) “*social connectedness*.” This is represented by the motif of a child and can be found in all three stakeholders (athlete, parent, coach).

Two of the interviewees work as coaches, all of them have children, and all made statements not only about their athletic- but also their coaching and parental identity.

A positive personality can be acquired from doing sport and they [athletes] can carry these [this latter attitude] with them throughout their lives and it will be useful everywhere. But I am not going to force my children to pursue sport, like my parents did not want me to be a top athlete. I do not want to obstruct them either, because I know you can play a positive role in society through sport.

Principles that emerged included “*never give up*,” “*tomorrow will be better*,” and “*start at the bottom*.”

I think the veteran World Championships show how much power they [athletes] have. If you use this [power] skilfully and well, you can pass on things that you may not have known about before. Certain values that a person acquires when he or she becomes a role model.

As a trainer, playfulness is emphasized as a focal point of identity construction, but as a retired, successful elite athlete and parent cognitive dissonance appears: the foremost desire is for children not to choose the path of becoming an elite athlete.

In other words, these stories indicated that very few resources were available for bridging the athletic identity with a desirable future identity to manage identity construction. “I would not do anything differently. I am grateful to my mom and my family for making this decision, for persevering, and for finally accepting my decision. Although I wouldn’t let my child go in that direction.” The latter quote is an indication that the desired balance between short- and long-term interests (essential for individual sustainability) in Hungarian elite sport has been severed.

## Discussion

The purpose of this study was to investigate i) the identity formation of elite athletes through experiences in sport, and ii) how to facilitate the development of a harmonic, individually sustainable sporting career. While the performance narrative was referred to as the prevailing storyline available for identity construction, results revealed three higher-order themes that are critical elements of the identity construction strategy (i.e., the central role of coaching, protective cover, and social connectedness; see Figure 2). For the individuals in the present study, their collective sporting experiences were mostly positive, such that all perceived that they would do the same again. However, in line with the claims of Howells and Fletcher (2015), cognitive dissonance appeared when athletes revealed that they hope that their child will not follow their path. The understanding of identity construction elements presented here (i.e., security and social connectedness) complement pre-existing work (Szathmári & Kocsis, 2020) about the connection between sport and individual sustainability. With pressure mounting on athletes to make the most of their athletic “investment,” the temptation for them to compromise their future by exploiting their bodies for short-term gain and by cheating is growing (Barker et al., 2011), so a well-balanced life based on “The Joy of Effort” is essential (Loland, 2012).

The results reported in this research also extend previous work by positioning the mental and physical health issues produced by environmental and psychological factors. (Coyle, Gorczynski & Gibson, 2017). Elite athletes have a broadly comparable level of susceptibility to high-prevalence mental disorders (such as anxiety and depression) as the general population (Rice et al., 2016; Nicholls & Levy, 2016; Vveinhardt, Fominiene & Andriukaitiene, 2019). Elite sport can cause health problems: psychological and physical pressure (Levy, Polman, Nicholls & Marchant, 2009), and a lack of long-term planning represent the focal areas that contradict the principles of sustainability. The elements described here (e.g. coaching) complement pre-existing work on the structure and function of social connections. For example, the fact that coaches functioned as externally situated helpers (Chatfield & Hallam, 2015), and provide long-term planning and impartial advice to athletes, is consistent with Clutterbuck's (2001) conceptualization of the mentor/coach (Sandardos & Chambers, 2019). Moreover, parent-child mutual disclosure and the sharing of emotions contributed to personal and relational growth (Brown, Webb, Robinson & Cotgreave. 2019). Applying IPA to the interviews, we extended Rynne and Mallett's (2014) study to find that sustainable practices were present but not guaranteed in the coach-athlete relationship development. This finding in part supports the relation to sport coaching. The humanistic approach is one that is person-

centred and emphasizes the empowerment of the individual in relation to achieving personal goals in ways that respect the athlete as an emotional, political, social, spiritual, and cultural being (Cassidy, Jones & Potrac, 2004; Lyle, 2002; Potrac, Brewer, Jones, Armour & Hoff, 2000). Achieving sustainability and organise human activities in a sustainable manner has become a task and an objective that we as humans must achieve partly by creating structures and new ontology that move individual behaviour in the desired direction (Heikkurinen, Rinkinen, Järvensivu, Wilén & Ruuska, 2016; Kocsis, 2018).

Congruent with this research, previous studies have reported that transition periods (especially retiring) are of particular importance in relation to athletes' careers. Practical remedies (e.g., providing proactive support) and coaching are well-acknowledged instruments for supporting athletes with the transition phase (Hallman, Breuer, Ilgner & Rossi, 2019; Park, 2012). The concept of sustainable sport is consistent with theoretical findings: athletic identity at the time of retirement exhibits a significant relationship with coping processes, emotional and social adjustment, pre-retirement planning, and anxiety about career decision-making (Grove et al., 2008). Interestingly, it appears that retirement may play an essential role in the evolution of experiences due to the associated distancing from events (cf. Coakley, 1983).

According to the athletes, their coaches were essential points of contact during their careers. They played a significant role in maintaining the identity of athletes and the individual sustainability of the whole system. Chambers (2017) also reflects in an analysis of Australian professional sports that one of the higher-order themes related to players' mental health concerns the player-development manager relationship. The expression of this shortage has parallels in the appearance of problems at a more general social level. A lack the elements of long-term planning, a human-centred approach, and a lifelong program all harm individual sustainability.

Offer (2006) claims that real individual sustainability means finding the right balance between short-term enjoyment and long-term security. Here, security is considered vital in terms of how much it is available to the athletes. As described, sport is a “protective cover” for participants. The analysis revealed that some of the positive outcomes were indicative of illusions regarding personal growth (Howells & Fletcher, 2015). The findings of this study also showed that a dual career is a real long-term identity-creation option, although as Stambulova, Engström, Franck, Linnér, and Lindahl (2015) state, maintaining a constant and equal focus on both sports and studies may compromise athletes' private life, health, and well-being. Educating athletes who

just start their elite sport career on how to making way for the positive values they represent (Kovacs & Doczi, 2020) and helping them access multiple dual-career role models would help them to envisage more diverse identity narratives and directives about how to steer the task of combining elite sport with education (Ronkainen, Ryba & Selänne, 2019).

### **Limitations**

The study applied retrospective interviews; as such, it may have been hard for participants to recall various experiences and how these influenced their overall sense of identity. The research is also limited because it was only feasible to prepare a single interview with each participant, which may not have been adequate in this investigation of a complex experience. The responses of the athlete participants, who were mainly male, may not reflect those of the broader sporting elite and related environment. Their inclusion may limit the generalizability of the findings; collecting additional information from other sportspeople, including a more equal gender distribution, would strengthen the knowledge base.

### **Conclusion and directions for future research**

There is no firm hypothesis in the literature or well-grounded theory about the individual sustainability of athletes in elite sport. Therefore, this research was not intended to justify or refute theories. Rather, the exploration of the comments and experiences of the participants about different topics help to expand the main topic. As there is little information available in this field, the approach we adopted is particularly suitable: we can base our hypotheses on the experiences of those who are involved in it. Accordingly, the participants were athletes, who, through their speech created the literature for analysis. The physiognomy of the study does not require the formulation of an assumption, but it does specifically address the research questions. The main question in our research plan was the following: what aspects of identity construction influence the identities and individual sustainability of elite athletes? The study findings indicate that coaches and the athletes' supporting system should help increase athletes' individual sustainability, insofar as athletes themselves lack the related know-how. The stakeholders in elite sport should anticipate demand from athletes in relation to implementing sustainability principles and perspectives.

The analysis shows that there is cognitive dissonance regarding the identities of elite athletes. This emphasizes that coaching, the "protective cover" and "social connectedness" (in the form of life-long career planning) should play an important role in moving elite athletes' lives in a more individually sustainable direction.

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## 9. Appendix IV

### Questions of the semi-structured interview

#### **Interview Guideline (How to extend sustainability to sport?)**

**Sustainability aims to preserve existing values for future generations. short vs. long-term**

**(you can avoid any question if it is inconvenient for you).**

1. Introduction, description of the purpose of the dissertation
2. Why did you become an athlete? (value)
3. What does sport mean to you? (value)
4. What does the Olympics mean to you? (value)
5. How do fans, people, see you? (value)
6. How can these be preserved for the next generation? (sustainability)
7. Was there anyone who had a big impact on your career? (career)
8. What is your relationship with sport now? (career)
9. Are you satisfied with what you have achieved? Do you want more? (career)
10. Can you pass on the knowledge / experience you have gathered? (career)
11. What is left out of your life because of sport? Would you do it again? Do you want your child to do the same?
12. Was there a performance constraint? Did you report this problem?
13. When did the competitions come from? Was there such a dropout?
14. If you could, what would you change in sports?