

## **Olympic Sustainability Reporting and Sport Participation\***

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### **Abstract**

In this paper I investigate the concept of sustainability, how the International Olympic Committee (IOC) has introduced sustainability reporting through its Olympic Games Impact (OGI) program, and how this monitoring relates to sport participation. To be truly sustainable in sport each Olympic Games should ensure that the practice of sport for the host community, especially recreational sport, is improved and measured. This is important as the Olympic Charter specifically mentions promotion of ‘sustainable development in sport’ (IOC, 2011a, p. 15), rather than ‘through sport’.

In 2000 the IOC, as part of its growing interest in managing its information about the impacts of its Games, initiated a new project, originally known as the Olympic Games Global Impact study (OGGI) to improve the evaluation of the overall impacts of the Games on the host city, its environment and its citizens, as well as to implement a consistent methodology to capture data pertaining to Games’ outcomes in the host community, region and nation. OGGI’s title was modified in 2007 and is now known as OGI (Olympic Games Impact). Its requirement is that ‘each Games organizing committee is to present its findings in a series of four reports (baseline, pre-Games, Games-time, and post-Games) that spans 12 years, beginning two years before Host selection and ending three years after the Games’ (Vancouver Organizing Committee for the 2010 Olympic and Paralympic Games, 2009, p. 11).

Before OGI any meaningful data regarding an Olympic Games’ sport’s participation sustainability was limited. A 2009 review of available research by Weed, Coren and Fiore, that investigated physical activity and health of the Olympic Games, concluded that ‘there was no reliable evidence to indicate that any Games staged to date had raised sport participation in the host community (Veal, Toohey and Frawley forthcoming p. 3).

While the OGI studies can provide much needed and valuable information about how the Olympic Games can contribute to sport’s sustainability, their purpose and use need to be transparent and accountable, beyond the Olympic Movement. Further, as Munda (2003, p.16) cautions, a ‘sustainability policy exercise implies difficult decisions such as the choice of indicators, their policy prioritization and the choice of ideal values; such an exercise is not a technical issue only, it is mainly a socio-political issue’. Additionally, as studies of the links between recreational sport participation and the Sydney 2000 Olympic Games, the 2003 Rugby World Cup and the 2006 Melbourne Commonwealth Games demonstrate, sport participation in a community is dynamic and subject to varied and numerous influences over time. Hosting a major international sporting event is only one of these influences. Separating them is not a straightforward process. To fully understand the links data is needed that explains how participation is also impacted by the nation’s sport development and participation system, including its broader public policy initiatives and health promotion strategies (Veal, Toohey and Frawley, 2011). Thus, to be meaningful sustainability indicators for sport participation must indicate openly how they have taken these influences into account in their measurements.

**Key words:** sustainability, Olympic Games, sport

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## **Introduction**

Sustainability is currently a growing concern in global politics and business. It influences how many individuals in developed and developing nations conduct their lives on a daily basis. However, the term 'sustainability' has become used frequently, in so many different contexts and at times with questionable intent, that it is in danger of losing its legitimacy, being regarded as a cliché, and exhausting its credibility. But what is sustainability, how relevant is it to sport and how does it impact specifically on Olympic Games sport?

In this paper I investigate the concept of sustainability, how it is becoming a global issue, how the International Olympic Committee (IOC) has introduced sustainability reporting, and in particular how this sustainability monitoring relates to sport per se, the most discernible activity of the Olympic Movement. I argue that Olympic Games' sport sustainability should entail more than using environmentally friendly practices and materials in sport facilities and its equipment. To be truly sustainable in sport each Olympic Games should ensure that the practice of sport for the host community, especially recreational sport, is improved.

## **Sustainability**

According to Tourism Australia there is no single universally accepted definition of what precisely constitutes sustainability, indeed there are over 300 differing definitions of the concept. Munda (2003, p.16) neatly sums up the consequence of this plethora of descriptions when he notes that 'there is a lot of complexity and fuzziness inherent in the sustainability concept'. Nevertheless, despite the variance in definitions, generally there is consensus on

the general principle behind the notion; specifically that present development needs to consider future needs. One of the most well known, oft cited and accepted definitions of sustainability comes from the World Commission on Environment and Development and is outlined as: "forms of progress that meet[s] the needs of the present without compromising the ability of future generations to meet their needs" (Tourism Australia, 2011, p.1). The notion of sustainability thus has a temporal perspective. It is also an outcome of both individual and collective decisions and their subsequent implementation. While there is an inherent link to the environment and its preservation, and this is still fundamentally at sustainability's core, in recent years the concept has morphed across many other facets of life, including business. In management terms, sustainability is now being closely linked to corporate social responsibility (CSR).

A milestone for sustainability's legitimacy occurred almost twenty years ago, when, in June 1992, the United Nations (UN) held the United Nations Conference on Environment and Development (commonly known as the Earth Summit) in Rio de Janeiro. While there were the inevitable criticisms that the summit was a 'talkfest' and its outcomes were diluted by political compromises, there were some concrete and enduring results. For example, the conference led to the adoption of Agenda 21, credited with providing a blueprint to achieve sustainable development worldwide. The UN also created the Commission on Sustainable Development (CSD) to monitor and report on implementation of the Earth Summit agreements. These two actions led to a breakthrough in sustainability as an environmental consideration in development through global initiatives, their monitoring and reporting (United Nations, 1997).

Since the Earth Summit raised profile of sustainability the concept has become more its applicability has widened. With its introduction across a range of activities, including sport and events, an accompanying industry has grown to implement its implementation and monitoring. The Olympic Movement is part of this trend.

### **Sustainability reporting**

Interestingly, the genesis of corporate sustainability reporting, which really began in the 1980s, lies in what could be considered opposing camps of the environmental spectrum. Chemical companies, not often applauded for their environmental duty of care, used sustainability reporting as a strategy to improve their corporate image problems. However, as these early evaluations were self monitored, their validity was open to question. Some critics maintained the evaluations were no more than a cynical promotional exercise in insensitivity. On the other end of the early reporting continuum were the ‘true believers’, environmentally conscious company leaders committed to improving their environmental management and who used monitoring for continuous improvement. From these contrasting beginnings sustainability reporting in business broadened in scope from focussing solely on environmental outcomes. A favoured method now consists of Triple Bottom Line (TBL) reporting. Such reporting includes the monitoring of an organisation or event’s financial, environmental and social outcomes. While TBL reporting is not without its detractors, the intent of TBL reporting is generally recognised as being more than a public relation task. ‘There are a variety of reasons that companies choose to produce these reports, but at their core they are intended to be "vessels of transparency and accountability". Often they also intended to improve internal processes, engage stakeholders and persuade investors (*The Guardian*, 2011).

Although becoming more accepted, there is not universal agreement on how Triple Bottom Line reporting should be conducted, the most appropriate indicators it should measure and how they should be measured. Its economic facet is the clearest cut, as financial reporting has long been standard practice in both private and public spheres; however the monitoring of the environmental and social facets of TBL is less accepted, less developed and more open to interpretation of results. Despite these limitations, ‘in the environmental domain, however, significant progress has been made in the last few years with the emergence of tools such as Environmental Management and Auditing Systems (EMAS) or Strategic Environmental Assessment (SEA)’ (Furrer, 2002). The Olympic Movement has also introduced initiatives in this area. For example, the IOC, the Academy of Sports Science and Technology (AISTS) and the Vancouver Olympic Organising Committee for the Olympic Games (VANOC) have produced the Sustainable Sport and Event Toolkit (SSET) for sport events. The SSET ‘identifies environmental, social and economic issues and opportunities throughout all phases and across all areas: venue and site selection, construction, venue and office management, community and supply chain involvement, transport and accommodation, catering, food and beverage and marketing as well as communications’ (International Olympic Committee, 2010, p.1)

### **Criticisms of sustainability reporting**

An enduring criticism of sustainability reporting revolves around its purpose. Is it to improve an organisation’s performance as a global citizen or more to do with organisational legitimacy? Is there a genuine desire for honest reporting or to appear to be an ethical corporation? Because of the questionable genesis of environmental and social reporting, these

suspensions have not been entirely eradicated. Laufer (2002) notes that, 'social and environmental disclosures are generally made for strategic reasons. For example, reasons having little or nothing to do with perceived responsibilities or obligations'. Even using external monitoring services does not completely negate this censure.

The emergence of the terms "greenwash" and "bluewash" (washing through the reputation of the United Nations) reflect an increasing apprehension that at least some corporations creatively manage their reputations with the public, financial community, and regulators, so as to hide deviance, deflect attributions of fault, obscure the nature of the problem or allegation, reattribute blame, ensure an entity's reputation and, finally, seek to appear in a leadership position (Laurer 2002, p. 254).

For example, the Global Reporting Initiative (GRI), developed through the United Nations, is a long-term, multi-stakeholder, international process whose mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines on the TBL dimensions of activities, products, and services. Despite the UN imprimatur there remains a concern about:

'The potential for companies, espousing sustainable rhetoric, to use the GRI to engage in 'greenwash' for the marketing benefit it would give their companies. Which is where the question of verification becomes relevant" (Macken, 2002). Similar concerns have been raised with the United Nations Global Compact, an initiative credited to the leadership of Secretary General Kofi Annan, designed to promote a core set of human rights, environmental, and social principles within the

private sector. Not long after its conception, civil society activist groups raised the now familiar charge “. . . that by attaching themselves to the United Nations, corporations may be able to ‘bluewash’ themselves throughout the developing world” (Karliner, 1999). The Global Compact, like the GRI, fails to require more than mere corporate representations of social responsibility (Deegan and Carol, 1993)’ (Laurer 2002 p, 259).

Another concern relates to applicability of the sustainability reports, such as the GRI, across different types the type of industries. ‘The GRI guidelines have been developed primarily with the needs of business organisations in mind, but other types of organisations such as government agencies and not-for-profit organisations can apply them. However, the application of these guidelines to the event industry remains to be verified’ (GRI 2002). The Olympic Games certainly can be placed firmly into the event industry.

According to Furrer (2002), a further consideration in the differences between financial and sustainability reporting lies in terms of its audience. While financial reporting is targeted primarily at an organisation’s shareholders, sustainability reports are of interest to a much wider set of stakeholders, whose interests may not be primarily financial. Furrer (2002) notes that this difference in stakeholders’ interests has implications for the Olympic Movement. He cautions that if the Olympic Games monitors its sustainability then ‘lack of overall reporting mechanisms as well as poor transparency and accountability in an area as sensitive and emotional as an Olympic Games may give rise to serious public outcry’.

### **The IOC and sustainability**

Of course, the most obvious concern regarding general Olympic sustainability is whether the Olympic Games will continue in the future. On the surface, their immediate future does not seem in doubt. If anything, there is a strong case to be made that the Olympic Movement is more sustainable now than in the past. Currently, there is no shortage of aspirant candidate cities, broadcast rights have escalated and sponsorship income is strong. While this provides a solid current platform, external contingencies raise questions about whether the Games' future is so secure. The global financial uncertainty, political violence and the seven year lag between a bid and celebration may make cities less eager to host in such an uncertain future. For example, both the Athens 2004 and London 2012 organising committees and their host governments have had to spend considerably more on their security costs than originally planned because of local and global terrorism. Similarly, the global financial crisis and rapid changes to technology dependent industries has impacted the decision of companies' which have long histories of supporting the Olympic Movement to continue their association. Eastman Kodak, which was a long term Olympic sponsor since the Athens 1996 Games until 2008, has filed for bankruptcy. Broadcasting too is in a period of flux as technology drives new platforms and public expectations about increasing accessibility and decreasing service costs increase financial pressures on broadcasters. While there may be these broad questions about the Olympic Games as a sustainable event *per se*, the more immediate concern for this paper regards questions about the Games' adherence to principles of sustainability, specifically of sport, and how and why this is measured.

It was really in the last decade of the 1990s that sustainability became integrated into Games lexicon and practice. Following discussions at the 1994 Centennial Olympic Congress, known as the Congress of Unity, held in Paris, the IOC recognised the significance of the environment and sustainable development to its mission, and, in 1996, added material on

environmental protection to the Olympic Charter (IOC, 2009, p. 1). The current Olympic Charter, in force as from 8 July 2011, includes in its mission ‘to encourage and support a responsible concern for environmental issues, to promote sustainable development in sport and to require that the Olympic Games are held accordingly’ (IOC, 2011a, p. 15). This is the charter’s only mention of the concept.

In addition to adding intent through this mission statement, so too the decade of 1990s signalled the introduction of sustainability into the IOC’s planning and operations. The IOC’s Sport and Environment Commission was formed in 1996. Its goal is ‘to advise the IOC Executive Board on the policy to be adopted by the IOC and the Olympic Movement on matters related to environmental protection and support for sustainable development in relation to sport (IOC, 2009, p. 1). Since then the IOC has also organised nine conferences on Sport and the Environment, the latest held in Doha, Qatar in 2011.

Of particular relevance to this paper and sustainability reporting was the third IOC World Conference on Sport and the Environment held in Rio in 1999. This conference recommended the adoption of the UN’s Agenda 21 by the Olympic Movement. This recommendation was subsequently approved by the IOC Session in Seoul in June 1999.

The Olympic Movement Agenda 21 establishes an action programme allowing members of the Olympic Movement to play an active part in promoting sustainable development, particularly in relation to sports activities.... Concrete recommendations are given in the area of environmental sustainability such as the use of fewer non-renewable resources, the adoption of energy saving solutions, the use of fewer dangerous products and the release of fewer pollutants into the air, water and soil, as well as the need for an environmental

impact assessment to be conducted before and after the event. Also, infrastructures created must be safe in terms of the quality and durability of materials and resistant to attack or natural disaster. The accommodation must be suitable for healthy living and allow economical use of natural resources (Furrer, 2002, pp. 11-12).

The IOC, as the supreme Olympic authority, is accountable for its sustainability choices in: the process of electing Olympic host cities that can deliver sustainable Games; and leading the process of monitoring the Games' preparation to ensure sustainable Olympic legacies are maximised and negative Games' impacts mitigated. In undertaking the latter of these tasks certain considerations must be paramount. First, what exactly is to be monitored and what is to be excluded from monitoring. Second, how do these remain consistent over time, so valid and reliable comparisons between editions of the Games can be made. Third, who monitors the monitors to ensure their methodology is sound and they are not subject to undue influence to publish positive outcomes. Fourth, how is the performance of sport per se factored into Games' sustainability planning and monitoring, given the Olympic Charter specifically mentions promotion of 'sustainable development in sport' (IOC, 2011a, p. 15), rather than 'through sport'. These considerations are examined below.

### **The Olympic Games Impact Study**

In 2000 the IOC, as part of its growing interest in managing its information about the impacts of its Games, initiated a new project, known as the "Olympic Games Global Impact" study (OGGI). Its aim was to improve the evaluation of the overall impacts of the Games on the host city, its environment and its citizens, as well as to implement a consistent methodology to capture data pertaining to Games' outcomes in the host community, region and nation. The

IOC commissioned the International Academy of Sports Science and Technology (Académie Internationale des Sciences et Techniques du Sport) (AISTS) to develop the OGGI (Furrer, 2002, pp. 21-22).

More than 100 research indicators were grouped into economic, socio-cultural and environmental indicators. These ‘indicators cover a vast range of activities, from those that are a direct result of the staging of the Olympic Games, such as the construction of competition venues or the Olympic Village, to others that are a more indirect consequence, such as the evolution of transport and accommodation infrastructure. Other indicators facilitate the monitoring of contextual data within a Host City and its region, such as crime rates, sports participation and water quality (IOC, 2009, p. 2).

In addition to garnering more information about Games’ organisation and impact, the introduction of OGGI was grounded in the IOC’s increasing engagement with sustainable development principles, its increasing adaption of information and knowledge management practices and its recognition that it needed to be and been seen to be more accountable and transparent following the 1999 scandals that had unearthed unethical practices by some of its members.

OGGI’s title was modified in 2007 following feedback from each of the Olympic Games Organising Committees (OCOGs) which had been involved in the project. Since this time it has become known as OGI (Olympic Games Impact). The requirement is that ‘each Games organizing committee is to present its findings in a series of four reports (baseline, pre-

Games, Games-time, and post-Games) that spans 12 years, beginning two years before Host selection and ending three years after the Games' (Vancouver Organizing Committee for the 2010 Olympic and Paralympic Games, 2009, p. 11). The IOC's current OGI framework suggests that the OGI's purpose is about : 'Providing structure; Facilitating transparency and accountability amongst stakeholders; Ensuring the vision & objectives of the Games, as expressed in the bid commitments, remain at the core of the Olympic project; and Enables sustainability and legacy to be at heart of the Games project' (IOC, 2011b, p. 19).

Significantly, the current iteration of the OGI notes that 'the OGI study is no longer to be considered as a stand-alone impact study to be treated in isolation' (IOC, 2011b, p. 20).

In keeping with the increasing use of triple bottom line (TBL) approach to measure sport event impacts by other event governing bodies the OGGI's indicators were grouped into the three TBL measurement categories of: economic, social and environment impacts. In terms of OGI indicators there are four indicators relevant to recreational sport participation: participation rates in sport, in general and in individual sports, school sports and available sports facilities (Veal, Toohey and Frawley forthcoming p. 6). Additionally:

five levels of geographical scale...take into account the different areas impacted by the planning and staging of the Olympic Games, they are: 1.) World, 2.) Country, 3.) Region, 4.) City and 5.) Olympic sites. The majority of requested data focuses on the regional and local aspects as it is these areas which are primarily impacted by Olympic construction, new and upgraded infrastructure, and the initiatives undertaken to achieve candidature commitment (IOC 2011b, p.34).

By introducing the OGGI the IOC's expectation was that better measuring and thus understandings of Games impacts would 'help future host cities plan Games which are

integrated into a successful long-term and balanced urban development, thus leaving the most appropriate legacy for the citizens' (Furrer, 2002, p. 22). Arguably, the IOC claimed its primacy in leading Olympic sustainability accountability when it stated that the OGGI's purpose was so, 'that the IOC could assess, manage, monitor and guide the parties involved with, and affected by, the preparation and hosting of Olympic Games' (IOC 2006, p.1).

The Vancouver Organizing Committee for the 2010 Olympic and Paralympic Games (VANOC) succinctly listed its understanding of OGI's purpose and its role as an OCOG in the project. It noted that OGI is 'an indicator-based monitoring and reporting system that is grounded in the concept of Sustainability'. VANOC's specific OGI objectives were:

- To measure the overall impact of the Games;
- To assist bidding cities and future organizing committees to maximize the benefits of the Games; and
- To create a comparable benchmark across all future Games. (Vancouver Organizing Committee for the 2010 Olympic and Paralympic Games, 2009, p. 11).

In terms of its implementation, the OGI study covers a period of 12 years (although originally it was 11 years), commencing when a city's official Olympic candidacy is announced by the country's National Olympic Committee (NOC) and concluding three years (originally two) after the staging of the Olympic Games. The OGI study requires that data is collected at specified intervals to produce the four reports that are required (IOC, 2006).

Despite the IOC's expectations that OCOGs arrange for the OGI as part of their planning since its introduction in 2000, according to the Economic and Social Research Council, the IOC only issued the first OGI Technical Manual in June 2007. Technical manuals are important documents that the IOC uses to transfer explicit knowledge to and from OCOGs.

The OGI Technical Manual 'is the governing document for the study; it sets out the rationale, scope and technical requirements, and incorporates material from the International Paralympic Committee (IPC)' (Economic and Social Research Council, 2010, p. 6). Since this first manual it has undergone a number of revisions and in 2012 the document is in its fifth edition, reflecting the changes to the OGI programme.

For example,

'as part of the process to make the OGI study a more comprehensive sustainability reporting and evaluation programme, the number of focus areas (originally contained in the study) was reduced and their specification and definition made more flexible, reflecting thematic topics to be monitored rather than prescriptive data requirements. The request for event statistical data was removed from the impact evaluation as it was recognised that this is largely captured in the Transfer of Knowledge (TOK) programme, and/ or in an OCOG's sustainability reporting' (IOC, 2011b, p. 34).

The London 2012 Organising Committee's OGI is based on a set of 120 defined indicators in economic, socio-cultural, and environmental areas (Economic and Social Research Council, 2010, p. 6). However, for previous OGIs there have been differing numbers of indicators, making cross Games comparisons difficult. If the IOC wants to create comparable benchmarks across all future Games, which it has clearly articulated as an OGI goal, then because of these discrepancies, at this stage, it is unlikely to achieve this target. So, while the programme itself is being refined and improved, an unintended consequence of this is the impact on comparable data.

The Vancouver 2010 Winter Games provide a case study that demonstrates that comparisons between different editions of the Games and even for the 2010 Games itself is difficult. In its initial design, the OGGI program utilized 154 indicators to report on the status of the Host City, Region and Country. In 2005, VANOC conducted an analysis of the OGI indicators. This took into account: the relevance of the OGI indicators to the 2010 Winter Games: VANOC's capacity to develop the indicators; as well as the cost of obtaining data. As a result of this review, VANOC recommended to the IOC that it collect information on only 105 indicators, which would include 94 OGI-specific and 11 locally-developed sustainability indicators that it believed were better linked to VANOC's strategic objectives, engage VANOC's stakeholders, and provide specific data on the Aboriginal participation and inner-city inclusion commitments given as part of the Vancouver 2010 Bid.

In reply the IOC reiterated the OGI's intent was to compare indicator data over time and between different OCOGs to provide better understanding of the impact of the Olympic and Paralympic Games on host cities and nations. 'The IOC restated that the 'core' indicators are obligatory and that replacement indicators are requested if the 'flexible' indicators cannot be completed. In summary, the IOC requested full implementation of the OGI indicators and/or the provision of alternate indicators where appropriate' (Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games, 2006, p.9). This interaction raised questions regarding the utility of OGI to a host city as well as to the IOC. As a result, despite its reply to VANOC, the IOC subsequently made some concessions. In 2006, following consultation with Olympic Games Organizing Committees for Torino 2006, Beijing 2008, Vancouver 2010 and London 2012 and the International Paralympic Committee, the IOC reduced the number of indicators to 126 (Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games, 2006). Thus, changes to

indicators occurred within different data collection phases of the VANOC OGI as well as between it and other OGIs in progress, reducing the possibility of valid comparisons between these Games.

Of course the discrepancies between the size of winter and summer Games, the nature of the competitions and the size of the Games will always mean that comparisons between these OGIs will be difficult. Also, because of changes to the specificities of how Games are organised, financial and geopolitical differences and technological advances between editions of the summer and winter Games, then any absolute comparisons need to be carefully considered.

A further consideration for the IOC regarding its monitoring schemes, such OGI, is the possibility that OGOGs will either focus specifically on or contain or their sustainability planning around indicators being monitored. Thus, inadvertently, the OGI can become a limiting factor to other potentially beneficial sustainability initiatives that are not being measured. As a consequence, creativity by an OGOG or its support of stakeholders' efforts in some economic, social or environmental areas may be stifled. In reality, this does not appear to be the case, as the recent Games have embraced sustainability in ways that could only have been imagined by early editions of the Olympic Games. For example, the 'Vancouver Olympic Organising Committee created a sustainability department within its organisational structure to coordinate and monitor all its activities, the rehabilitation of the Lower Lea Valley in Greater London and the creation of a London Sustainable Development Commission by all parties involved in the London 2012 Olympic Games (IOC 2006, p.2). Through such initiatives there is a case to be made that sustainability has become a byword for legacy.

Another concern for the IOC and the OCOGs regarding the OGI is who monitors the monitors. The OGI researchers are meant to be independent and free from commercial or political pressure? Is it really possible for an OCOG to find an organisation that fully fulfils these criteria in the politically sensitive area of an Olympic Games? Who determines the level of acceptable independence? For example, is a university that receives government funding truly independent? As previously mentioned, the notion of monitors' impartiality has been an ongoing criticism of sustainability monitoring. While OCOGs have outsourced their OGI research to best meet this requirement, the IOC initially placed final responsibility for OGI studies with the OCOGs. However the OCOG dissolves before their final OGI study is completed and so now the host NOC 'bears responsibility for the required deliverables from an OCOG following its dissolution. As the OGI study continues past this time (to G+36) the NOC will be ultimately responsible for the delivery of the second and final official report' IOC, 2011b, p. 38). As an example, for the 2012 Games, after the London Organising Committee of the Olympic Games and Paralympic Games Limited (LOCOG) dissolves, 'responsibility for completing the study will pass to the National Olympic Committee (British Olympic Association)... [and] to date the London 2012 OGI study has been funded by the Economic and Social Research Council (ESRC) (Economic and Social Research Council, 2010, p. 7).

Similar to other TBI sustainability reports, the OGI studies are not immune from the previously mentioned problems of validity and reliability of data in social and environmental areas, as well their ability to draw conclusive data. The 2009 VANOC OGI Report stated

‘Thus our overall conclusion about the impact of the upcoming Olympic Games (based on a selection of indicators from the three spheres) is that there has been a very slight positive Games impact (0.4), based on somewhat reliable to reliable data (72 percent reliable), and on 83 percent general conclusivity of the constituent indicators.

The Games have had at least some impact on each of the three spheres in this pre-event phase. The Games have had a weak positive impact on the social-cultural sphere. Data for the sociocultural indicators are the most unreliable of all spheres, but still allow for a sufficiently conclusive analysis. For the environmental sphere, reliable data attests that indicators in this sphere have been mostly unaffected, or minimally affected in a negative way (again, with sufficient conclusivity). Finally, the Games appear to have had a marginally positive impact on the economic sphere; however, this conclusion is based on somewhat reliable data that is inconclusive in 30 percent of the cases’ (Vancouver Organizing Committee for the 2010 Olympic and Paralympic Games, 2009, p. 112).

In other words, both the reliability and validity of the data affect the findings to the extent that there are many qualifiers around any claims of impact. Additionally, and more importantly, as Munda (2003, p.16) cautions, ‘sustainability policy exercise implies difficult decisions such as the choice of indicators, their policy prioritization and the choice of ideal values; such an exercise is not a technical issue only, it is mainly a socio-political issue’. This holds true for the measuring the impact and sustainability of the Olympic Games as much as for any other enterprise.

## **Olympic Sport and sustainability**

Much of the discourse surrounding sustainability of the Olympic Games has to date focused on its economic impact, environmental concerns, or on the post Games use or underuse of Games venues. The OGI represents an attempt to widen the Olympic sustainability paradigm. This is essential in terms of measuring sport practice and moving sustainability data beyond these earlier narrow confines. Before OGI any meaningful data regarding a Games' recreational sport participation sustainability was scant. Indeed, a 2009 review of available research by Weed, Coren and Fiore, that investigated host city and host nation physical activity and health outcomes of the Olympic Games, concluded that 'there was no reliable evidence to indicate that any Games staged to date had raised sport participation in the host community (Veal, Toohey and Frawley forthcoming p. 3), despite many assertions in official documents that the Olympic Games was the catalyst to invigorate the recreational sport patterns of local inhabitants.'

Even in the more general Olympic sport participation sustainability there is also a dearth of information. The IOC website provides information on the activities of its Sport for All Commission but does not provide information that demonstrated it has evaluated how the activities may or may not increase recreational sport participation in communities. Further, as Veal, Toohey and Frawley note:

A recent IOC fact-sheet on *Legacies of the Games* (IOC, 2010) lists legacy achievements from the last five of both summer and winter Olympic Games. A total of 67 legacy items are recorded, covering: accessibility, accommodation,

country/city branding/ reputation, cross-cultural exchange, cultural preservation, economic impacts, education, environment, events, medical impacts, public health, sport, telecommunications, tourism, transport infrastructure, urban regeneration, venues and volunteering. 'Sport' appears in the entries for only three of the ten Games (Barcelona, Turin, Salt Lake City) and only in one case (Barcelona, as above) is quantitative evidence presented on increased sport participation in the host community, although a number of the 'venues' items indicate that Olympic venues are used by the general public (Veal, Toohey and Frawley forthcoming p. 9).

Thus, the research evidence claiming increased recreational sport participation from the Olympic Games is weak. 'Weed *et al.* (2009: 8) note that Olympic Games hosts have generally not taken active steps to generate a sport participation legacy, so the limited evidence available to date is based on a 'passive' scenario in which any influence of the Games on participation is assumed to have occurred automatically but the efforts of the Beijing 2008 and the London 2012 organisers may begin to change this pattern for the future (Veal, Toohey and Frawley forthcoming p. 9). But how valid will be any results that claim causality?

Veal, Toohey and Frawley (forthcoming) caution:

The level of sport participation in a community is, however, a dynamic phenomenon subject to numerous influences, of which a city's hosting of an international sporting event is but one. To fully understand the influence of this one factor it would be necessary to establish a much better understanding of the whole sport development and participation system, including the impact of broader public policy initiatives and health promotion strategies... However,

given the other factors at work, any identified increase in participation rates would provide only *prima facie* evidence that the increase may have been caused by the hosting of the event. Conversely, static or declining levels of sport participation would provide only *prima facie* evidence of a lack of event impact, since it is possible that the hosting of an event could contribute to a slowing or halting of a declining participation trend. (Veal, Toohey and Frawley forthcoming pp. 9-10).

In terms of sport participation sustainability, what do the dilemma of comparisons, questions about the process, and possible lack of conclusive results mean for the OGI? Firstly, data protocols and indicators will need to be comparable, able to draw conclusions beyond *prima facie* evidence, and the process over the whole 12 years will need to be transparent and accountable for each and every future Games. Achieving these outcomes will be a challenge; however, as the IOC has instigated the process to measure sport participation through the OGI it is essential for it to manage the process successfully. Currently, the OGI examines recreational sport participation in its 'Sport for All and Elite Sport' indicator category. Specifically for its 'sport and physical activities' focus area it 'has two objectives: assess the level of sports practice in the city and region, and monitor its evolution over time' (IOC, 2011b, p. 88). Specifically the IOC OGI Technical Manual states that data needs to be collected on 'Sport club participation (i.e. associations, school clubs, multi-sport associations) Participation in commercial settings (i.e members in sport clubs and fitness centres). Disabled sportsmen and sportswomen. Participation of young people in sports activities. Active and inactive (sedentary) behavior of the population' (IOC, 2011b, p.88). The challenge is to move beyond *prima facie* evidence to prove causal links from staging the Olympic Games to any changes in physical activity in the host city, region and nation.

The problem is not unique to the Olympic Movement. The current lack of research based evidence to back claims of major sport events boosting participation occurs in many instances. The following section provides some evidence of this form of sport sustainability from an Australian perspective.

### **Australian sport events and recreational sport sustainability: the Sydney 2000 Olympic Games, the 2003 Rugby World Cup and the 2006 Commonwealth Games**

An analysis of the Sydney 2000 Olympic Games by Veal, Toohey and Frawley (2006) found that that improving recreational sport participation was not a significant consideration of the Sydney Games organisers despite some post Games claims of it as a legacy. Further, they found that while some studies found that the Sydney Games may possibly have had a positive effect on sports participation, such results are questionable. Veal, Toohey and Frawley concluded that overall any inferences in participation levels as a result of the Games can be drawn only tentatively because of changes in the design of the government's adult participation data collection instruments and further problems regarding the timing of the children's surveys that were used. From 2001 onwards, a more stable data collection system used by the Australian government has made it possible for studies to provide more reliable estimates of the pattern of sports participation in the nation following the hosting of the 2003 Rugby World Cup and the 2006 Melbourne Commonwealth Games. Of course, this did not guarantee that results from this data would indicate the events led directly to more recreational sport being played in the host city, region or nation.

Research by Frawley and Cush that investigated the 2003 Rugby World Cup held in Australia found that rugby participation in Australia increased following the hosting of the 2003 Rugby World Cup. The researchers used quantitative data (registration records) and qualitative data

(interviews with managers in the sport) to explore possible reasons for any changes in recreational rugby associated with the event. ‘The registration data suggest that the recorded increases post the event followed a positive trend that started in the year 2000. Over the 2003–2004 period, junior registrations increased by 20% while senior registrations increased by 5.34% (Frawley and Cush, 2011, p.73). However, Frawley and Cush cautioned that ‘that the mere hosting of the 2003 Rugby World Cup was not the sole reason for increased rugby registrations. The interview data highlighted the importance of the ARU’s continued investment in rugby development programmes that originally started in the late 1990s. This investment was viewed by the respondents as the most effective way of increasing long-term rugby participation in Australia (Frawley and Cush, 2011, p.74). In other words, the World Cup event by itself cannot be credited with improving rugby’s participation sustainability, instead the event built on existing programs to leverage participation. It was these ongoing programs that were perceived to be the more effective approach.

Like many other sport events, the 2006 Commonwealth Games, held in Melbourne were seen as an instrument to improve sport participation sustainability. The Victorian government declared ‘that one of its objectives in supporting the hosting of the 2006 Melbourne Commonwealth Games was ‘increasing sporting participation’ (Insight Economics, 2006: ix). An improvement over the Sydney Games was that this aspiration was supported by ‘Games-time programs aimed at increasing sports participation’ (Insight Economics, 2006: xv)’’ (Veal, Toohey and Frawley, forthcoming, p. 15). Despite these lofty ambitions, targeted programs and improved data protocols regarding participation by Australian sport authorities a study by Veal, Toohey and Frawley (forthcoming) failed to find any impact of the Commonwealth Games on recreational sport participation. ‘This is consistent with the results of the official immediate post-event evaluation report which did not report increased participation but only ‘modest increases within the community in willingness to increase their

participation in sport' (Insight Economics, 2006: xv)' (Veal, Toohey and Frawley, forthcoming, p. 15).

These three examples raise the important consideration that, even when reliable and consistent participation data are available, the question of causality in the context of the wider sport development and participation system remains to be addressed before any meaningful link between an event and sport participation sustainability can be claimed (Veal, Toohey and Frawley, forthcoming, p. 15).

### **Conclusion**

The IOC has embraced sustainability in its philosophy and practice. Following the lead of other organisations, it is now measuring sustainability using the Triple Bottom Line approach. Beginning with the Beijing Olympics it has implemented the OGI as the vehicle to monitor sustainability indicators for each edition of the Games. This provides an opportunity to further understand and consequently integrate sustainability across all aspects of the Olympic Charter's mission, including 'sport for all'.

In this paper I have argued that the concept of an Olympic Games' contribution to sport's sustainability should entail more than using environmentally friendly practices and materials in sport facilities and its equipment. I have proposed that the concept of sport sustainability through an Olympic Games should also include increasing and improving the practice of sport for the Games' host communities, especially through recreational sport. This is becoming even more important as in many Western nations the population is becoming more sedentary, with increasing health problems. This also follows sustainability's conceptual basis of present practices impacting on the future.

As the IOC's Charter (IOC, 2011a, p.15) lists one of the IOC's missions 'to encourage and support the development of sport for all' then measuring as well as implementing Games' related programs that increase sport participation can demonstrate this mission in a tangible way. As with other aspects of the Games' sustainability, increased sport participation in a Games host community, region and nation is now being measured through the OGI. However, a causal relationship must be proven. Sport participation in a community is dynamic and subject to varied and numerous influences over time. Hosting a major international sporting event is only one of these influences. Separating the influence is not a straightforward process.

While past studies have demonstrated that establishing prima facie links between a major sport and sport participation is possible, this does not provide a complete answer. To fully understand the links more than data is needed that explain how such participation is also impacted by a nation's whole sport development and participation system, including public policy initiatives and health promotion strategies (Veal, Toohey and Frawley, 2011). Thus, to be accountable and transparent, sustainability indicators measuring sport events' impact on recreational sport participation need to indicate openly how the full range of such possible influences are factored into their measurements.

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