



Title: Living with imperfect comparisons: The challenges and limitations of comparative Paralympic sport policy research

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## Living with Imperfect Comparisons: The Challenges and Limitations of Comparative Paralympic Sport Policy Research

*“There is no reason to believe there exists an easy and straightforward entry into comparative social research. All the eternal and unsolved problems inherent in sociological research are unfolded when engaging in cross-national studies. None of the methodological and theoretical difficulties we have learned to live with can be ignored when we examine critically such questions as to what is comparative research, how we go about doing comparative work, and how we interpret similarities and differences in countries compared”* (Øyen, 1990, p. 1).

### **1. Introduction**

The importance and utility of comparative research is a central tenet of intellectual inquiry, evidenced for example, in the development of sociology as an academic discipline (Jowell, 1998; Mills, van de Bunt, & Bruijn, 2006). Landman (2003) suggested that making comparisons is the essence of human nature. For Durkheim (1938), “comparative sociology is not a particular branch of sociology: it is sociology” (p. 139). It is, perhaps, for this reason that Øyen (2004) suggests that all “social science is based on comparisons, whether it is comparisons between different groups, different social phenomena or different process” (p. 278). Comparative research, therefore, is a central concern for all sociologists as it provides an important theoretical and methodological approach for generating, testing and developing sociological theory (Kohn, 1987). The challenges faced by comparative scholars, then, are fundamental to understanding the very nature of sociology (Jowell, 1998; Øyen, 1990). Beyond sociology, this natural inclination to make comparisons has also been the basis for extensive multi/inter-disciplinary scholarly work evident from the proliferation of comparative based journals (e.g., Comparative Political Studies, Comparative Education,

Comparative Studies in Society and History) that has led to comparative research becoming a distinct field of inquiry (Hantrais, 2008).

Despite this inclination toward comparison, only a few scholars in the area of sport policy and the related area of strategic management of high performance sport have undertaken this type of work (e.g., De Bosscher et al., 2006, 2015; Digel, 2002; Green & Houlihan, 2005; Houlihan & Green, 2008). Those that have, meanwhile, have reduced and simplified their observations of (typically high-performance) sport systems in an attempt to explain variation and cause and effect without overlooking or ignoring the characteristics that make each sport system distinctive. As argued by Henry and Ko (2015), these attempts have been hindered, in part, by a lack of discussion in sport management/policy literature regarding the epistemological, methodological and practical challenges of this type of research. Many of these challenges are discussed at length within the broader comparative literature, and are perhaps well known to those who have carried out comparative sport management/policy research, but to date there appears to be little explicit attention from scholars in sport management to examining these types of studies. It is thus the goal of this review to begin this process of examining the challenges and opportunities comparative sport policy research.

To begin we concur with Jowell (1998) who suggests that social scientists contemplating or engaging in comparative research should be as open about their limitations as they are enthusiastic about their explanatory powers (p. 174). The need for this type of reflection has arguably become even more necessary as sport scholars continue to expand their approaches both in terms of size (e.g., increasing number countries compared) and in scope (e.g., application to alternative contexts such as Paralympic sport). To expand on the latter of these points, while much of the comparative sport management/policy literature has focused on sport systems relating to able-bodied sport, there is an emerging focus on the

Paralympic sport domain (e.g., Dowling, Legg, & Brown, 2017; Legg & Darcy, 2015; Legg, De Bosscher, Shibli, & van Bottenburg, 2015; Pankowiak, 2015). In light of the further development of these research agendas, a review of the inherent challenges, opportunities and implications of this type of comparative scholarship is appropriate.

The purpose of this paper as already alluded to above is to explore the challenges and limitations of conducting comparative sport management/policy research by drawing upon examples from the application of comparative models (or modified versions of them) and considering how this might apply specifically in the Paralympic domain. To this end, the paper draws upon two bodies of literature. The first is general (non-sporting) comparative literature (e.g., Baistow, 2000; Dogan & Pélassy, 1990; Dogan & Kazancigil, 1994; Ebbinghaus, 2005; Hantrais, 2008; Harkness, 1999; Landman, 2003; Kohn 1987, 1989; Ragin, 1992, 2006; Sartori, 1970, 1991; Schuster, 2007) and in particular the works of Øyen (1990, 2004) and Jowell (1998). Many of the issues discussed within this broader literature, are also evident within, and have implications for, the current direction of comparative sport management/policy research and its application to Paralympic sport specifically. The second body of work that will be used for this article relates directly to the comparative sport management/policy literature (e.g., Bergsgard et al., 2007; Digel, 2002; De Bosscher et al., 2008, 2015; Green & Houlihan, 2005; Houlihan & Green, 2008; Truyens et al., 2014) and more directly the ongoing work examining comparative research in the Paralympic domain (Dowling et al., 2017; Legg & Darcy, 2015; Legg et al., 2015; Pankowiak, 2015).

To further clarify our purpose, and to position ourselves within the broader comparative sport policy debate, our intention with this paper is to not simply critique ‘from the sidelines’ of the comparative sport policy debate. Rather, we aim to contribute to the debate, relating the epistemological and methodological issues of conducting comparative sport policy research, and in doing so, provide a road map for future scholarship. In this sense

we draw upon Øyen's typology/distinctions taken from her aptly entitled book chapter "*The Imperfections of Comparisons*" (Øyen, 1990); in which she provides a useful distinction between the different types of social scientists/sociologists involved in (non-sporting) comparative research. The view we adopt herein is thus closest to Øyen's (1990, p. 5) notion of the "*comparativist*" perspective in that we acknowledge other points of view but argue that the advancement of comparative sport policy research can only occur through further questioning of the distinctive characteristics of comparative analysis.

Following a review of the pursuit of international sporting success, which sets the context for many of the comparative analyses, the paper attempts to provide a general overview of comparative sport management/policy research. To do so, the paper draws on discussions within the broader comparative literature to identify limitations and challenges of conducting comparative research. We suggest that much of this is evident within, and has implications for, the future direction of comparative sport management/policy research. This section uses a number of examples from Paralympic sport to support the discussion and concludes by offering suggestions for how future comparative sport management/policy research in Paralympic sport can be further enhanced.

## **2. The Global Sporting Arms Race**

The continuous pursuit of international sporting success is an increasingly taken-for-granted behavior within many developed countries (Digel, 2002; De Bosscher et al., 2006, 2008; Green & Houlihan, 2005; Houlihan & Green, 2008; Kikulis, Slack, & Hinings, 1992; Slack & Hinings, 1994). Academics have labelled this phenomenon the "*global sporting arms race*" (De Bosscher et al., 2006), which has resulted in nation states investing substantial sums of funding for success at the Olympic and increasingly the Paralympic Games (Beacom & Brittain, 2016; De Bosscher et al., 2006, 2008; Green & Houlihan, 2005; Green & Oakley, 2001; Grix & Carmichael, 2012). As a consequence, high performance

sport systems have become more competitive, complex, and uncertain (De Bosscher et al., 2006; Digel, 2002). It would also appear that due to the increased competition between many countries, albeit with varying degrees and levels of commitment, attempts have been made to imitate the success of the previous GDR/Soviet Union sport systems as well as other nations in order to design the most efficient and effective sport system (Digel, 2002; Green & Houlihan, 2005).

Green and Oakley (2001) highlighted the link to the GDR/Soviet Union systems arguing that “many antecedents of the former Eastern Bloc’s ‘managed approach’ to elite sport are increasingly apparent” (p. 247) in international elite sports systems. De Bosscher et al. (2006) also support this viewpoint by stating “the former eastern bloc countries have undoubtedly played an important role in current developments of elite sport” (p. 194). The GDR/Soviet Union system was considered “the vanguard of developing sporting excellence” (Green & Oakley, 2001, p. 247) due to its consistent approach to producing high performance success that demonstrated high performance sport was not a matter of ad hoc chance or dependent upon uncontrollable environmental factors. Rather, international success could be achieved through a deliberate strategic process of organizational, economic and political calculation (Digel, 2002). The features of this approach included a long-term and systematic athlete development model, a strong political willingness to support high performance sport, state controlled apparatus, specialist sport schools/academies, and world-renowned coaching and sport science support (Dennis & Grix, 2012; Green & Houlihan, 2005; Green & Oakley, 2001). This systematic approach to elite sport performance, combined with a number of socio-cultural developments including the advent of television, commercialism, and professionalization of sport, were perhaps what led governments to invest substantial sums of money into pursuing Olympic glory, and in some cases Paralympic success as well. For Green and colleagues, the outcome of the pursuit of an ‘optimal solution’ to winning medals

has been an increasing homogenisation or uniformity of elite sport systems, with countries attempting to imitate (i.e. copy) tried-and-tested high performance related structures and processes of other countries through a slow but steady process of policy learning and transfer (Green, 2007; Green & Collins, 2008; Green & Houlihan, 2005; Green & Oakley, 2001; Houlihan & Green, 2008).

It is against this broader backdrop that the comparative sport policy literature has emerged with practitioners and academics (e.g., Bergsgard et al., 2007; De Bosscher et al., 2006, 2008, 2015; Digel, 2002, 2005; Green & Houlihan, 2005; Houlihan & Green, 2008) seeking solutions to the increasingly complex problems of delivery and management of high performance sport. In particular, comparative sport scholars and practitioners alike have sought answers to the following questions:

- *How can we measure international sporting success?*
- *What makes some nations more successful at international sport competition?*
- *What exactly do nations need, in order to produce a high performance athlete?*
- *What is the most efficient and effective way to develop high performance athletes?*

In an attempt to answer these questions, sport scholars have created and developed theoretical models to help compare nations often through empirical examination (e.g., Bergsgard et al., 2007; Digel, 2002; De Bosscher et al., 2008, 2015; Green & Houlihan, 2005). Although these approaches share commonalities, they also vary in their overall interests and emphasis, and in some cases are underpinned by fundamentally different philosophical traditions. It is to these models and their philosophical underpinnings that we now turn.

### **3. Comparative High Performance Models**

De Bosscher et al. (2008) acknowledged there was no perfect model for comparing high performance sport systems although a few have tried (e.g., Bergsgard et al., 2007; Digel, 2002; De Bosscher et al., 2008, 2015; Green & Houlihan, 2005; Green & Oakley, 2001;

Houlihan & Green, 2008; Petry, Steinbach, & Tokarski, 2004; Truyens et al., 2014). These earlier attempts were, for the most part, descriptive and atheoretical exploring the relative strengths and weaknesses of successful Olympic nations (e.g., Digel, 2002, 2005; Petry, Steinbach, & Toraski, 2004; for exception see Green & Oakley, 2001). Digel (2002), for example, examined the common features and differences of Olympic sport in eight countries (Australia, China, Germany, France, United Kingdom, Italy, Russia, USA) emphasising the importance of socio-political context. Green and Oakley (2001), meanwhile, focused on the importance of process-related factors by analysing emerging trends towards uniformity of elite sport systems and identified 10 similarities in approach to elite sport in six countries (UK, Canada, USA, Australia, France, Spain).

More contemporary comparative sport policy scholarship has attempted to go beyond description by adopting more theoretically informed research designs. Green and Houlihan (2005), for example, examined policy change across three countries (Australia, Canada, United Kingdom) and three sports (track and field athletics, sailing, and swimming). In employing the Advocacy Coalition framework as theory of policy change, Green and Houlihan (2005), meanwhile, investigated the variability and similarity of the manner in which countries have prioritized high performance sport.

De Bosscher et al. (2006) then built upon these studies and developed their own theoretical framework for comparing sports policy factors that led to international sporting success (abbreviated to 'SPLISS'). In the first iteration the SPLISS consortium employed a mixed-method design examining six countries (De Bosscher et al., 2008, 2009), and this was expanded to 15 for the second study (De Bosscher et al., 2015). The SPLISS model has also been applied in sport specific contexts including track and field/athletics (Truyens et al., 2014), tennis (Brouwers et al., 2015) and judo (Mazzei et al., 2016).



Despite their varied interests and emphasis many of the above sport policy models discussed also share much in common. First, there is an understanding of the importance in comparing nations using multiple-levels of analysis. Digel's contextual-based approach, for example, identified three-levels: social (e.g., ideology, interest in sport and physical activity), system (e.g., rewards, Olympic tradition, competition), and environment (e.g., state, economy, media). De Bosscher et al. (2006) also identified three levels; macro, meso, and micro. Macro level factors included the country's population, economic welfare, geography, politics, and culture. Meso-level factors included elements of the sport system that may influence the long-term performance of an athlete such as the organizational structure of sport and micro-level factors were individual characteristics that directly influenced the athlete such as genetics, and the coach-athlete relationship.

Both Digel (2002) and De Bosscher et al. (2006) further suggested that all factors were interrelated and influenced (albeit to varying degrees) a country's international sporting success. The difference between Digel (2002) and De Bosscher's (2006) approach, however, was that the latter focused exclusively on meso-level factors, as these were the only elements decision-makers could influence. We will return to this later as an important distinction, particularly in the context of Paralympic sport where access to opportunities for athlete development are fundamentally shaped by the national socio-political, economic and cultural settings within which the athlete is located. (Beacom & Brittain, 2016; Dowling et al., 2017; Smith & Thomas, 2012).

A second commonality of comparative models discussed earlier is that despite the ongoing process of homogeneity of many elite sport systems there is recognition of no 'one' ideal approach but rather multiple ways in which success can be realized. As Green and Oakley (2001) conclude, "it would be erroneous to preclude the possibility of diversity, uniqueness or distinctiveness from any future debate on global development of elite sport

systems in different countries” (p. 265). A similar conclusion was reached by De Bosscher et al. (2015), who noted:

....we naively started the first project [SPLISS 1.0] thinking that we could identify a uniform best practice pathway towards building a perfect elite sport development system, we now know that it is not so much the whole of a system structure, but much more the unique combination of system pieces that result in a variety of different approaches that deliver elite sport success (p. 15).

Hence, although we are witnessing an increasing uniformity of high performance sport systems there remains considerable diversity in their development and management (Green & Oakley, 2001).

A third commonality of the comparative sport models previously discussed is the recognition that population and funding are likely two major determinants to medal success (e.g., Bernard & Busse, 2004), although they do not necessarily ensure or guarantee it (Mitchell, Spong, & Steart 2012). Interestingly for the purposes of our discussion related to the Paralympic context, Wong et al.’s (2013) review of Paralympic team sizes identified a similar pattern of medal success in Paralympic Games.

A fourth commonality amongst comparative sport models is a continued focus on what are commonly referred to as developed (resource-rich) nations. Digel et al’s (2005) study focused on eight countries (stated above) while Green and Houlihan (2005) compared Australia, UK and Canada across three sports (Athletics, Sailing, and Swimming). Bergsgard et al’s (2007) analysis centred on Germany, England, Canada and Norway while Anderson and Ronglan (2012) studied four Nordic nations (Sweden, Denmark, Norway and Finland). Houlihan and Green (2008) examined nine countries including China, Japan, Singapore, Germany, France, Poland, Norway, New Zealand and the USA and De Bosscher and colleagues (2006) analyzed six nations in the first iteration (Belgium; divided into Flanders and Wallonia, the Netherlands, Canada, Italy, Norway and the UK) and 15 in the second (ten European, 2 in Asia, 2 in America and Australia) (De Bosscher et al., 2015). The focus on

resource-rich nations is also common in analysis of Paralympic sport; in some respects replicating the marked asymmetry in opportunities for athlete development and ultimately positions on the medal tables – referred to later in the paper.

#### **4. Challenges and Limitations of Comparative Sport Policy Research**

In drawing upon the general comparative literature (e.g., Baistow, 2000; Dogan & Kazancigil, 1994; Dogan & Pélassy, 1990; Ebbinghaus, 2005; Hantrais, 1999, 2008; Harkness, 1999; Landman, 2003; Jowell, 1998; Kohn, 1987, 1989; Øyen, 1990, 2004; Sartori, 1970, 1994; Schuster, 2007) and the sport specific models described earlier, it is now possible to delineate and discuss challenges and limitations in conducting comparative sport management/policy research. When considering the challenges and limitations to such comparative work, we accept that these have, in the main, been articulated by comparative theorists over the years, including the authors of the SPLISS framework. The purpose of this section is to synthesize these and to frame in such a way as to facilitate analysis of the process of comparison. We divide challenges and limitations into two general areas: methodological and philosophical. The methodological issues concern how comparative studies are designed and the practicalities of conducting the research. The philosophical discussions concern the ontological and epistemological assumptions that underpin comparative analysis and thus address the broader issues of why sport scholars would even choose to carry out comparative research. We acknowledge that the challenges and limitations identified below are by no means exhaustive and many will require a much more detailed discussion at a later point in time. Nonetheless, the discussion that follows attempts to capture the breath of the challenges in conducting comparative sport management/policy research and provide insights into how they can be addressed for future research.

**\*\*\*insert Table 1 here\*\*\***

## 4.1. Methodological

### 4.1.1. Unit of Analysis.

#### *4.1.1.1. Is the nation-state the appropriate unit of analysis?*

Choosing the nation-state as an appropriate unit of analysis is likely because it is relatively stable, enduring and homogeneous (Dogan & Pélassy, 1990; Hantrais, 2008; Jowell, 1998; Landman, 2003). Much of the comparative sport management/policy literature has focused exclusively on the nation-state and this is a logical choice for sport scholars, in part, due to multi-sport events, such as the Olympic and Paralympic Games, and international single sports competitions such as soccer and athletics, which use countries as the basis for teams. Regardless, there are conceptual challenges. The International Olympic Committee (IOC), for example, currently recognizes 206 nations, sometimes referred to as member countries (of the participants at the 2016 Olympic Games, the refugee team who competed under the flag of the IOC, constituted a significant response by the IOC to international developments). At the same time the IOC refers to National Olympic Committees as promoting and protecting the Olympic Movement in their respective countries, while the United Nations refers to member states, of which there are 193.

Further complications of using the nation-state as a unit of analysis include that some are defined on the basis of geo-political boundaries that can be subject to considerable change. Examples include the dissolution of the Soviet Union and the former Yugoslavia which led to debate concerning international recognition of the successor states, or the peculiarity of the United Kingdom which is permitted to enter four countries (i.e. the ‘home nations’ which taken together constitute what is generally recognized as the nation-state) under the single banner of “Team GB” (Hassan, 2012). Second, some national boundaries are subject to intense negotiation and renegotiation that may occur by conflict (e.g., South Sudan and the Republic of Sudan). This is not even taking into account the issue of athletes that are

either disassociated through their refugee status (reflected in the formation of a Refugee team), claim no nationality at all, or have their origins from countries that are not formally recognized by the International Olympic Committee. Third, in cases where the nation-state is perceived to be relatively stable there can be huge variation within and amongst the population. Canada, for example, has longstanding issues of unity, namely the sovereignty and separation of the province of Quebec. Similarly, is the United Kingdom's on going issues surrounding the "Brexit" decision to leave the European Union and the potential future devolution of its home nations. Fourth, the above examples highlight much broader issues of national heterogeneity in that even the most stable and homogenous nation states have fundamentally different cultural, ethnic, and social boundaries within them. In short, a fundamental challenge of comparative research to date is that "within-variation may sometimes be greater than between-variation" (Øyen, 1990, p. 7). An alternative option, meanwhile, is proposed by Dogan and Pélassy (1990) who suggest that there may be equal if not greater value in comparing municipalities, states, regions, provinces, and or territories, which are arguably more stable and less heterogeneous domains than that of the precarious nation state.

Finally, in a Paralympic context, the nation state or National Paralympic Committee's (NPCs) also make for difficult units for comparison purposes. The asymmetries that exist between NPCs are particularly prevalent when comparing resource-rich and resource-poor countries, the so-called 'disability divide' between the Global North and Global South (Novak, 2014). Beacom and Brittain (2016) refer to this as the "gulf in resourcing for para-sport" (p. 273). While each NPC may have formal rights and responsibilities within the Movement, many are under resourced to the point of not being able to provide the most basic of services such as taking athletes to the Paralympic Games.

#### ***4.1.1.2. Is it possible to separate micro, meso and macro levels?***

One of the more explicit discussion points within the comparative sport literature is the methodological choice surrounding the level of analysis. De Bosscher and colleagues' (2006; 2015), for example, focused exclusively on the meso-level policies and processes arguing that these were the only factors in control of decision-makers. In contrast, Houlihan and Green (2008) rejected the notion that it was even possible to fully separate policies and politics (i.e. meso-level) from the broader historical, cultural and political context of sport systems (i.e. macro-level). This issue is also evident within the general comparative literature, with researchers divided between whether to focus on the micro and the macro political levels with the former emphasizing the role of agency and the individual and the latter underlying structures and processes (Landman, 2003). Ragin (1987, p. 5) provides a useful distinction between these approaches as either "*comparativist*" or "*non-comparativist*", with the former deliberately choosing to engage with or define these macro-level entities (e.g., culture, ideology etc.). The latter, meanwhile treats such notions as abstractions that need not be operationalized (Øyen, 1990). Despite these differences, it is apparent from our perspective at least, that many comparative sport scholars such as De Bosscher (2015) and Green and Houlihan (2005) have adopted a "*totalist*" (Øyen, 1990, p. 5) approach to their research, in that they have deliberately chosen to acknowledge and accept their comparative shortcomings and the methodological stumbling blocks of comparative research in order to operationalize their studies.

There are a number of examples, meanwhile, that can be drawn from the Paralympic context that lend support to using the *comparativist* (Øyen, 1990) viewpoint where ideology, culture, and history matter when conducting comparative research. In the Paralympic Movement, the critical nature of macro level considerations is reflected in two ways. First, the economics of resource-poor regions has immediate and profound consequences for

investment in disability sport generally and para-sport specifically. Second, the historical and cultural impediments to disability rights, evident in a number of national contexts, have direct and profound consequences for policy priorities relating to investment in Paralympic sport. The importance of this relationship between disability rights and opportunities to engage in disability sport is clear and reflected in the IPC's vision "To enable Paralympic athletes to achieve sporting excellence and inspire and excite the world" (IPC, n.d.). Promoting the rights of people with disabilities in resource-poor regions is thus critical to the longer-term development of Paralympic sport.

The extent of this challenge is reflected in the way in which the Games are dominated in relation to numbers of participants and medal success by particular continental associations. Of the 39 African nations in London 2012, 31 had team sizes of less than five athletes, with 15 only sending one athlete – usually a male, while at the same time, the European share of medal success in London was 48 percent rising to 82 percent for the winter Games in Sochi 2014. African success, meanwhile, was 7.4 percent and 0 percent respectively (Beacom & Brittain, 2016). In this sense, the governance and development of Paralympic sport relates to wider concerns of disability advocacy and culture and challenging notions of what may be considered as separate macro and meso level considerations. Consequently, we argue, as many comparative scholars have done previously (e.g., Jowell, 1998; Øyen, 1990), that comparative studies within sport should pay as much attention to the choice and compilation of aggregate-level contextual variables as they do to individual-level dependent variables. We also contend that comparative sport researchers should not separate micro, meso and macro levels. Any attempt to do so, in our view, runs the inherent risk of either ignoring or overlooking entirely the patterns of variation and/or uniqueness that comparative researchers seek to uncover.

#### **4.1.2. Equivalence.**

The issue of equivalence within comparative research is a complex fundamental methodological issue for all comparative analysts. Equivalence brings to the forefront concerns of how we know we are studying the exact same phenomena in different contexts and how we know that our observations and conclusions do not actually refer to fundamentally different things (Hantrais, 2008; Jowell, 1998; Kohn, 1987; Landman, 2003; Mills et al., 2006; Øyen, 2004)? More specifically, there are three interconnected equivalence-related issues discussed within the broader comparative literature that have particular relevance for sport: sampling, construct, and functional equivalence.

##### ***4.1.2.1. Sampling equivalence – which countries and how many?***

According to Ebbinghaus (2005), sampling (i.e. case selection) is a crucial but often overlooked issue in comparative research. The main issue, however, for most comparative scholars including sport management/policy scholars is which countries to include and why. Ebbinghaus (2005) discussed the issues of case selection at length and specifically addressed how comparative researchers should go about selecting cases. The author suggested that even in large-N, comparative studies, countries are often selected inadvertently on the basis of historical and political processes and for pragmatic reasons such as cultural familiarity (Ebbinghaus, 2005). This trend was also evident within the comparative sport management/policy literature with Houlihan and Green (2008, p. 21) selecting both English and non-English speaking countries, those that have longstanding history of international sporting success, and aspire to be successful internationally. They also included countries with specific characteristics such as Poland being a former communist government and New Zealand with a small population but strong sporting culture. Furthermore, although the authors did provide a qualification that their sample made no claim of representation, they did suggest it was possible to draw broad conclusions regarding elite sport development trends.



Similarly, “when the SPLISS 2.0 was announced, any nation interested was invited to participate, under the condition that they were able to collect the comprehensive data set and follow the research protocol” (De Bosscher et al., 2015, p. 66). In both of these examples (namely Houlihan & Green, 2008 and De Bosscher et al., 2015), however, it is apparent that the selection of countries (i.e. sampling) has primarily occurred on the basis of pragmatism and is therefore likely to be subject to what Ebbinghaus (2005) referred to as ‘selection bias’ whereby researchers select cases based on their positive outcome to a given research question/hypothesis.

Furthermore, what can also be drawn from the comparative sport management/policy literature is a clear trend towards the proliferation of the number of countries used to compare high performance sport systems. Kohn (1987) suggests, however, that “it is not necessarily true that the more nations included in the analysis, the more we learn. There is usually a trade-off between number of countries studied and amount of information obtained” (p. 726). Kohn further argued that the number of countries selected should be based on whether they provide added value in terms of generating important theoretical insight relative to the time and resource investment. Similarly, Landman (2003) referred to this issue as a methodological trade-off between the level of abstraction and the scope of countries under examination. In particular, Landman (2003) distinguished between large-N (i.e. many countries) and small-N studies, whereby the former focused on general dimensions and the relationships between variables at a high level of abstraction and the latter emphasized an intensive contextual analysis of a select few cases (countries) at a low-medium level of abstraction. The former can be described as the “*comparative*” method and the latter the “*statistical*” method (Landman, 2003, pp. 24-25).

In support of the above viewpoints, Øyen (1990) and Jowell (1998) drew attention to, and questioned, the value of continued expansion of countries used for comparison. They

argued that comparative researchers should not compare too many countries at once. We concur with Jowell (1998) and Øyen (1990) that comparative sport scholars should only compare enough countries to achieve their intended aims; rather than attempting to compare as many nations as possible. The latter approach, we would argue, runs the inherent risk of reducing comparisons to highly superficial visual and graphical representations which may be aesthetically pleasing and politically attractive, but serve little or no explanatory purpose and ultimately detract from the more fundamental similarities and differences that are embedded within and between countries.

How Paralympic nations should be grouped or compared and exactly how many countries should be compared in future comparative research thus remains open to debate. However, the sharp contrast in levels of support for the development of Paralympic sports between resource-poor and resource-rich countries has resulted in a marked asymmetry in medal tallies for the Paralympic Games. For example, of the 39 African nations represented at the London 2012 Paralympic Games, 31 had team sizes of less than five athletes, with 15 only sending one athlete – usually a male (Beacom & Brittain, 2016).

Thus, while there is a rationale for comparing the relative effectiveness of athlete development pathways operating in different resource-rich countries, comparing resource-rich with resource-poor countries in a Paralympic context would be problematic given the far-reaching structural differences that exist. At the same time, there may be a case for comparing the responses of NPCs in resource-poor countries, given the number of shared challenges, thus providing some insight into best practice.

#### ***4.1.2.2. Construct/question equivalence - Are we comparing apples with oranges?***

A second issue in comparative studies is construct equivalence which is about ensuring that instruments are measuring the same variables across cases (Hantrais, 2008; Mills et al., 2006). This issue has received much attention within in the broader comparative

literature (e.g., Dogan & Pélassy, 1990; Jowell, 1998, Hantrais, 2008; Landman, 2003; Mills et al., 2006; Øyen, 1990, 2004) but comparatively little within sport management/policy literature (for exceptions see De Bosscher et al., 2015). If the goal of comparative research is to search for similarity and difference amongst cases (nations), then the research process requires equivalent instruments that measure concepts in order to make comparisons. Thus, meaningful comparisons depend on ensuring construct equivalence (Mills et al., 2006). In discussing the issue of construct equivalence specifically, Øyen (2004) stated:

....for every single variable collected, the same unpleasant question can be raised: how do we know that one variable in one country expresses the same qualities and is perceived the same way as a variable with the same kind of characteristics found in another country (p. 277)?

Øyen (2004) goes on to suggest that the issue of construct equivalence is compounded and/or magnified as more variables are added to the measurement tool. The challenge faced by comparative sport management/policy scholars, then, is the development of instruments, methodological approaches and theoretical models that strike a balance between simplicity of indicators that can be easily standardized versus ensuring that instruments encapsulate the similarities and differences of each sport system.

The broader comparative literature is also instructive here, in that it identifies the issue of language as a large component and greatest barrier for ensuring construct equivalence (Jowell, 1998; Øyen, 2004). For Jowell (1998), there are many, taken for granted, standardized concepts that have no equivalents in other countries. In drawing upon the challenges faced by the International Social Survey Programme, an international collaborative network of comparative social scientists, Jowell (1998) provides a number of examples of construct (non-) equivalence such as the word 'God' and taken for granted conception of the Left-Right Political Continuum, both of which have no equivalence in many countries. There are a number of other similar examples within the sporting context, such as the different interpretations of sport, physical activity, participation and legacy and

pertinent here the extensive debate regarding what constitutes disability. Not only do these concepts have many different meanings in varying contexts but they are being constantly redefined and reinterpreted making construct equivalence difficult to achieve (Nicholson, Hoye, & Houlihan, 2010; Schuster, 2007).

Furthermore, construct equivalence issues can be evident between seemingly alike native-English speaking countries. In reference to the International Social Survey Programme survey design process noted earlier, Jowell (1998) suggested that that many English-speaking countries have made the potentially serious mistake of not translating their questionnaires from one country to another with the assumption being that English is consistently used in the same way in all participating nations. The reality of course is vastly different. The issue of construct equivalence, then, lends further support for the abovementioned inseparability of levels of policy analysis. As Jowell (1998, p. 170) further notes, “different languages are not just equivalent means of defining and communicating the same ideas and concepts. In many respects, they reflect different thought processes, institutional frameworks, and underlying values.”

In relation to construct equivalence within the Paralympic context, there is a particularly notable challenge presented through the marked cultural difference in perceptions as to what constitutes disability and what are considered appropriate social responses to disability. Blauwet and Iezzoni (2014), for instance, noted multiple complex factors that contributed to lower participation rates in sport for persons with a disability including structural, socioeconomic and attitudinal barriers. Alvis-Gomez and Neira-Tolosa (2013), meanwhile, analyzed social determinants affecting teenagers with disability and inclusion/exclusion in high-performance sport. Collectively these studies suggest that the issues of construct equivalence are likely to be of equal if not greater concern when comparatively examining the Paralympic context.

#### ***4.1.2.3. Functional equivalence – Is the data collected comparable?***

Closely linked to the above discussion of sampling and construct equivalence is the notion of what is sometimes referred to as functional equivalence; the issue of whether data collected can be used to draw equivalent comparisons between countries (Øyen, 1990, 2004; Jowell, 1998; Schuster, 2007). The work of Schuster (2007) is particularly informative in this regard by highlighting the problems of national participation survey data as the basis for comparisons. More specifically, Schuster (2007) cautions against using national participation data to inform international comparative studies and suggests that researchers should spend more time concerned with how we import and utilize pre-existing (i.e. secondary) data. For Schuster (2007), “Comparable data are not necessarily usable data, by the same token, usable data are not necessarily comparable data” (p. 183). The comparative sport literature is perhaps guilty here in that it has been usually dependent upon national-based surveys that were not originally designed, nor intended to be, used for comparative purposes. Sport scholars, for example, have used national based participation data such as Sport England’s *Active Lives Survey* (Sport England, 2016) and Canadian Heritage’s *Sport Participation Survey* (Canadian Heritage, 2013) to compare the relative sport participation and physical activity between countries. Although it should be acknowledged that these participation figures are likely the best and only data available in which to make such comparisons, the limitations of using this data should nonetheless be acknowledged. National participation surveys are often designed with different scopes, employing different methodologies, and utilizing hugely different sample sets which are then used to statistically generalize within different populations. Issues are further compounded as data sets are then collected as part of much larger, often government led, general household surveys. Sport Canada’s sport participation figures, for example, were derived from a larger General Social Survey. Similarly, participation figures in England were derived from the General Household Survey,

renamed the General Lifestyle Survey in 2008 to coincide with the survey's inclusion in the Integrated Household Survey (Office for National Statistics 2010). If such comparisons are to be meaningful, it is necessary to standardize national data sets. In short, it is evident from Schuster's (2007) analysis, and in echoing the sentiments of Jowell (1998, p. 169), that achieving functional equivalence is very difficult and it will require a great deal of additional work to ensure appropriate standardization.

In the context of disability sport generally, and Paralympic sport more specifically, issues with functional equivalence flow from construct (non-) equivalence of disability and related concepts. This creates a range of practical problems for researchers engaged in data collection and analysis across contrasting socio-political and cultural contexts. Not only is there likely to be less publically available national data sets of disability sport participation, but also any data will tend to be a sub-set sample population within a broader survey attempting to achieve a larger often political purpose. Furthermore, of the disability-specific data sets that do exist, and assuming that the challenge of construct equivalence has already been overcome, there is still no guarantee that it is functionally equivalent to enable meaningful comparison. In sum, if ensuring sampling, construct and functional equivalence was difficult to ensure standardization of measures within the able-bodied sporting context, based on the availability and the specificity of the demographic, the process will be even more challenging when comparing Paralympic sport.

#### **4.1.3. Data.**

The decision-making and methodological trade-offs surrounding data collection and the analytical process of comparative studies comprise the final set of methodological challenges. There are too many challenges and limitations of data collection and analysis to list here and space precludes a fuller discussion. Furthermore, data related issues are to a large extent dependent upon the specific methodological approach adopted. Nonetheless, we

will focus on the more pertinent and relevant data collection and analysis related issues that are commonly discussed within the broader comparative literature and faced by most comparative sport scholars.

#### ***4.1.3.1. Too Many Variables (Data Overload).***

A methodological trade-off made by comparative sport scholars is designing research instruments to sufficiently encapsulate the phenomenon in question against the feasibility and practicality of the data collection approach. As noted earlier, SPLISS 2.0 (De Bosscher et al., 2015) had 96 critical success factors (variables) and 750 (sub-variables) across nine pillars. To some, the underlying assumption may have been that more variables ensures a greater, more refined and accurate reflection of social reality. Landman (2003) forewarns, however, against this noting the inherent danger of too many unknowns. Rather than better reflecting social reality, the inherent danger of too many variables is that comparisons can become meaningless with similarities and differences being lost in the inventories and survey instruments. In an attempt to respond to the too many variables predicament, comparative scholars have recruited international teams of researchers to collect data in their respective countries. Principal researchers typically identify a co-investigator (or a research team) within each country, who is often known to the principal researcher, and has the interest and capacity to engage in the lengthy and often costly comparative research process. The principal researcher's network of interest and resourcing therefore has a significant bearing on the overall research design and the manner in which the comparative analysis is undertaken. As we discussed above, the number of countries added to the comparative research endeavour also has practical implications for those collecting the data. This has required comparative sport scholars to develop standardized procedures (*modus operandi*) and make difficult decisions about what sort of data can or cannot be collected given the researchers' practical constraints.

#### ***4.1.3.2. Data Access.***

Beyond designing appropriate data collection instruments and selecting research teams responsible for collecting data are the practical challenges of data access from key personnel. These problems are by no means unique to comparative methods as many social scientists face similar problems. Nonetheless, given the nature (i.e. specificity and breadth) of the information sought in comparative sport studies it is likely that access to key informants is required in order to collect all the necessary data. These key informants are often politicians, governmental officials, and professionals working for national organizations and agencies who may not want non complementary or politically sensitive information shared. These same individuals may also be loath to share information that could potentially compromise a competitive advantage over other nations. In relation to the Paralympic sporting context, the movement is relatively smaller than its able-bodied counterpart, so in theory, there are fewer people to contact and collect data from. This can be both a pro and con for the researcher and particularly when the administrators are volunteers who may change rapidly from one year to the next. A further challenge is the dissipated nature of the Paralympic sport system. Reference to a *system* itself may actually suggest greater strategic and operational integration than is actually found in many national contexts.

#### ***4.1.3.3. Snap-shot/Time-Lag.***

Large-scale comparative projects collect data from a number of individuals across multiple locations. This is time-consuming and given that sport is such a dynamic area of policy and practice, the ‘snap-shot’ of data collection may be obsolete by the time results are analyzed. Another key issue is the sharing of data and analysis protocols beyond the immediate research team. Good practice in research encourages the development of data management and analysis so that findings can be verified and or challenged while also taking into account copyright and intellectual property (Van den Eynden et al., 2011). Paradoxically,



comparative researchers sometimes utilize data in the public domain but may not extend this principle by providing access to the data they have generated. Anyone who wishes to replicate a study would thus be confronted with an enormous research endeavor rather than mining the data that is already collected.

## **4.2. Philosophical**

The above methodological discussions are examples of issues concerned with *how* to conduct comparative research. The next set of questions are more ontological and epistemological in nature relating to *why* (if at all) scholars should undertake this approach.

### ***4.2.1. Should we compare fundamentally different systems?***

The previous methodological discussion surrounding equivalence, and the problem of functional equivalence, in particular, brings to the forefront a number of broader concerns regarding the appropriateness of comparing fundamentally different national contexts, the purpose and motivation for conducting comparative research, and ultimately whether the comparative approach is appropriate at all. In assessing the progress of comparative sport management/policy research, it is apparent that many scholars have focused on similar, typically westernized and often resource-rich nations. This ongoing emphasis remains a limitation of the comparative sport management/policy literature, especially given that many of the NPCs recognized by the IPC are situated within resource-poor regions. This begs the question as to the value of comparing Paralympic systems, especially if its value only extends to a few resource-rich nations.

Furthermore, and at the other end of the spectrum, there has also been a notable absence of a few ‘powerhouse’ countries in Olympic sport such as the United States, China, and Russia. These countries have likely been omitted from comparative sport management/policy research because of practical reasons but also perhaps as a result of their relative challenge in accessing data.

A second question is why scholars would undergo comparative analysis. Landman (2003, pp. 4-10) presents four reasons: contextual descriptive, classification, hypothesis testing, and prediction. *Contextual descriptive* is trying to understand political events and phenomena in countries in order to generate more knowledge about a nation and by extension one's own country in order to avoid ethnocentrism (Dogan & Pélassy, 1990). Digel's (2002) descriptive analysis of the characteristics of the top ten most successful countries at the Summer Olympic Games may be viewed as an example of this. *Classification*, which is the second motivation of comparative researchers, is an attempt to describe and simplify complex realities by identifying key common features across countries. This can be achieved through creating typologies or categories identifiable through shared characteristics. *Hypothesis testing*, the third reason for pursuing comparative studies, is the search for factors that explain what has been previously described and classified. It is only once researchers are able to describe and classify that it is possible to begin to generate hypotheses and theory in order to explain phenomenon. Finally, the highest and most difficult level of comparative research is predictive in that researchers seek to make *predictions* based upon the generalizations from their comparisons. These four rationales imply a hierarchical ordering of comparative research whereby descriptive is lower and predictive is higher. This implies that comparative researchers are often seeking different outcomes based on their underlying motives. Understanding why and how comparative studies are conducted can then assist future Paralympic comparative sport scholars to develop the most appropriate research designs and methods.

#### ***4.2.2. What is the value in comparing systems? Comparing for whom?***

A second predominantly philosophical question with comparative sport studies relates to its' inherent value and to whom this value is relevant. There is a tendency within the general and sport-specific comparative literature for underpinning research to be heavily

funded by and dependent upon funding and governmental agencies. While external funding is entirely necessary in order to operationalize such large-scale comparative research projects, it is important that the researchers acknowledge the limitations of this financial dependency. This is because funding agencies may have their own vested national interests in terms of benchmarking their own progress and thus influence which countries are selected for comparison and why (Jowell, 1998). Second, funding dependencies will limit the number of countries included. Third, even for nations willing and able to invest in comparative research projects, it is debateable as to the willingness of the sport organizations being studied as to whether they would fully divulge their secrets. In this vein, and linked to the data sharing discussion above, the characteristics comparative researchers are trying to uncover may also be the very same ones that give countries a competitive advantage? Furthermore, it is also important to acknowledge that comparative researchers are often, albeit to varying extents, invested in and involved with their own country's high-performance sport systems. Thus, even if comparative researchers are able to uncover key factors that lead to international sporting success, they might not want to share such insights with all participating nations? Fourth, even once comparative data is collected, it is important to consider *how* external agencies and government politicians might use the data. Like researchers, external actors who initiate comparisons also have vested interests in comparisons (Øyen, 1990). In this sense, comparative researchers have a moral and ethical duty to be aware of the potential use and even misuse of their findings. These issues are aptly summarized by Øyen (1990):

Many of the external actors initiating comparisons are based within a national context and may have vested interests in studies which compare their country to many other countries. So far, national research councils and funding agencies have given preference to research which includes their own country. Politicians are calling for comparisons which increase their understanding and mastery of national events, while accepting that intuitive comparison form a basis for the major part of the decision-making. Bureaucrats make extensive use of national and international statistics for comparisons, and industry and business are constantly comparing the social context of national and foreign markets. The need for more precise, reliable comparisons has become part of a political and economic reality which is a driving force behind the

demand for more cross-national comparisons, most of which apply to specific problems and are fairly limited in scope (p. 2)

Such limitations should not be interpreted as suggesting that there is no value in carrying out comparative research. On the contrary, in an increasingly globalized world, we would argue that despite the above concerns there is an even greater need for more comparative analysis within sport and even more so within the Paralympic domain. The above concerns do, however, bring to question the value of comparing sport systems and highlight practical challenges that could be faced by researchers.

***4.2.3. What should be the goal of comparative research – identifying patterns of similarity (uniformity/homogeneity) or variance (heterogeneity)?***

The above discussion of the inherent value of comparing high-performance sport systems brings to the forefront broader questions regarding the purpose of comparative research. Central to these concerns is the question of whether comparative researchers seek to identify patterns of similarity (i.e. homogeneity) or variance (i.e. heterogeneity). Oakley and Green (2001) documented the increasing uniformity between many westernized countries in relation to the development of high-performance sport systems, whereby countries have emulated the features that characterized the Soviet Union/GDR during the latter part of the 20<sup>th</sup> century. Could the same assumption be made by Paralympic comparative researchers, or given the extent to which the rights and opportunities of disabled people are influenced by the social and cultural context, is the trajectory of the Paralympic Movement even more determined by macro-level contextual issues?

Furthermore, and to build on the above, more specific discussions of levels of analysis and data collection, is not the variation that exists between national Paralympic teams the very thing that makes them unique? Thus, any attempt by sport management/policy researchers to collect data based upon a pre-conceived framework, especially one developed around able-bodied sport, has the potential to depict sport systems erroneously because of

pre-determined criteria. In doing so, the researcher thus runs the risk of overlooking or entirely ignoring distinctive features and characteristics that make Paralympic nations unique. In our view, it would be misleading to adopt approaches used in the comparative analysis of able bodied sports systems, in the investigation of Paralympic sport.

#### ***4.2.4. Ontological and epistemological assumptions – are we ‘talking past one another’?***

Stemming from the uniformity and homogeneity discussion and the question of the overall purpose of comparative research, is the recognition that comparative sport scholars (and the various models/approaches adopted by them) have varied considerably in terms of interest, emphasis and underlying philosophical assumptions. For Landman (2003), “ontology, epistemology, and methodology are terms that occur in the discussion of the philosophy of science and the distinctions between them often become blurred in the comparative literature” (p. 16). Although the distinctions may be blurred and the discussions challenging, it is important to appreciate the underlying philosophical position of a comparative researcher. What they constitute as reality and how it is possible to generate knowledge from it, will dictate how a study is operationalized.

These underlying philosophical differences have resulted in different research design and methodological choices that have attempted to engage with different levels of political analysis with some sport scholars focusing on what De Bosscher et al. (2006) described as meso-level aspects and others on macro-level aspects (Bergsgard et al., 2007; Wing Hong To, Smolianov, & Semotiuk, 2014). Bergsgard et al. (2007) suggests this difference in emphasis is more likely a reflection of sport researchers’ underlying philosophical assumptions and symptomatic of the longstanding debate in social science between those who emphasize structural/institutional factors versus agents and agency. As a result of these fundamental ontological and epistemological differences, some scholars are likely to be ‘talking past one

another' (Grix, 2010) in an attempt to advance knowledge of high-performance sport systems (Hantrais, 2008).

For instance, comparative sport policy analysis has appeared to use a structuralist perspective and ontological assumption, that sports structures have essential components and elements. This suggests an orientation towards a belief that an understanding of institutional configurations and practices provides the basis to understanding high-performance sport. As Bourdieu (1990) cautions, however, researchers need to be ontologically and epistemologically aware about a "move from the model of reality to the reality of the model" (p. 48). In this sense, comparative research can find itself attempting to justify its own version of reality rather than letting the empirical data 'speak' for itself.

Therefore, rather than disagreements in processes per se, these philosophical 'meeting points' (Hantrais, 2008) or debates more accurately embody fundamental differences in the way that researchers see the world and seek to understand it. As such, much of the debate and discussion surrounding 'the most appropriate way' to compare countries may be inherently futile. Those who adopt a positivist viewpoint may seek a 'one size fits all' explanation while those further along the spectrum will question, perhaps with varying degrees of cynicism, the degree to which identifying the underlying mechanisms of a sport system is even possible.

What might be best are studies rooted in differing epistemological traditions and thus able to yield different research questions and methodologies. Imagine a phenomenological subjective approach that rejects the rationalist and structuralistic explanation of comparative elite sport policy, be examining the lived experiences of elite athletes in high-performance sports systems and how differing elements of high-performance sport might look from an athlete or coach perspective. Another example may be a grounded theorist's approach to building categories and concepts of elite sport systems using empirical data, thus building a theory from the ground up, rather than hypothesis testing or applying a pre-determined

empirical model. These alternate ontological and epistemological perspectives may then offer potential alternatives to examine able-bodied and Paralympic sports systems.

## **5. Concluding Thoughts – Moving Comparative Sport Policy Research Forward**

Previous attempts to compare national high performance sport systems have almost exclusively focused on Olympic and other forms of able-bodied sport. To date only a few studies have addressed the potential for comparative research in the Paralympic domain. Before encouraging more comparative studies in the Paralympic domain it was recognized that understanding the opportunities and challenges inherent within the approach was warranted. Our hope is that by reviewing the limitations and possibilities already noted within comparative able bodied sport literature, future researchers in the Paralympic domain would have a broader frame of reference for understanding and, where appropriate, contributing to equity and opportunity for athletes with disabilities in a range of national contexts.

More broadly, this paper has tried to identify a number of philosophical, methodological and practical difficulties and challenges within comparative research. In doing so, we follow in the footsteps of others who have attempted to articulate and encapsulate the limitations and challenges of conducting comparative research outside of the sport domain (e.g., Baistow, 2000; Dogan & Pélassy, 1990; Dogan & Kazancigil, 1994; Ebbinghaus, 2005; Hantrais, 2008; Harkness, 1999; Jowell, 1998; Kohn, 1987, 1989; Landman, 2002; Øyen, 1990, 2004; Ragin, 1992, 2006; Sartori, 1970, 1991; Schuster, 2007). Many of the issues highlighted and discussed by these comparative non sport scholars, we have argued, are also evident within, and have implications for the future direction of comparative sport management/policy scholarship and subsequently for Paralympic comparative studies. Furthermore, our intention in highlighting these issues is not to criticize previous comparative sport management/policy studies, but rather as “comparativists” (Øyen, 1990, p. 5), we seek to engage in further academic discussion and debate surrounding the methodological and

philosophical opportunities of conducting comparative research. We, like Jowell (1998), believe that comparative sport scholars should be as open about their limitations as they are enthusiastic about explanatory powers. Some authors have gone so far as to suggest that undertaking comparative research is more akin to “damage control” (p. 720) and even if comparative researchers were somehow able to mitigate many of the problems identified above, the conclusions drawn from their analysis would only move from being “deeply suspect to being just plain problematical” (Jowell, 1998, p. 176). We do not share this viewpoint, but these remarks do illustrate the challenges that lie ahead for comparative researchers.

In our view, we see two potential ways forward for researchers seeking to comparatively examine the Paralympic domain. The first is to apply pre-existing models and pre-determined factors without any further consideration or consequence of applicability or suitability to the unique features that characterize the Paralympic domain or acknowledgement of the broader context in which Paralympic sport is situated. While this approach would shed light on the similarities and differences of select Paralympic sport systems, it runs the inherent risk of ending up in what Ragin (2006) described as “the doldrums of template-driven research” (p. 635) in that it may overlook or ignore entirely the very characteristics that make Paralympic sports distinctive and unique from its able-bodied counterpart.

Furthermore, existing able-bodied comparative research appears to be conducted primarily on Western and or resource-rich nations with a focus on an agenda to drive higher performances in support of the continued ‘global sporting arms race’. If this model is applied to the Paralympic context, it may be counterproductive to the furtherance of the Paralympic Movement as a whole. We contend that while this has the potential to make Paralympic sport within a small number of super-elite countries more competitive, the potential consequence is



to widen, rather than bridge the divide between ‘have’ and ‘have nots’. Nations who can fund such research will further cement their advantage and medals won while those who cannot will fall further behind.

A second approach for future comparative Paralympic research involves recognizing the layers of complexity within the Paralympic domain. This approach acknowledges that it is not possible and/or appropriate to ignore macro level factors and that it is not possible, for example, to fully encapsulate disabled participation or the competition structure without considering the broader societal and historical factors that influence them. Furthermore, such an approach would require a paradigm shift in contemporary sport management/policy comparative analysis, moving researchers away from “seeking uniformity among variety to studying the preservation of enclaves of uniqueness amongst growing homogeneity and uniformity” (Sztompka, 1988, p. 215; cited in Oyen, 1990, p. 1). As a starting point, and due to the current lack of comparative work in the Paralympic domain, it would seem appropriate and/or necessary to undertake lower order studies such as description and classification before it is possible to produce higher order research such as hypothesis testing and prediction.

Regardless of which approach is chosen it is also important to understand *why* the research is taking place. Within the framing of the abled-bodied literature, are researchers looking to find ways in which the comparative nations can improve their own performance, and exert dominance? Conversely, is comparing successful Paralympic countries done to learn lessons that are purposefully applicable to enhance the development of the Paralympic Movement and to encourage nations to engage and compete? Much research relating to disability and the Paralympic Movement already emerges from the transformative research tradition. The day to day challenges faced by people with disabilities, resulting from economic, political and cultural traits that work against the differently-abled, has been a catalyst for campaigning researchers to challenge discriminatory practices and systemic

inequities (Legg, 2011). In this sense, comparative research which is seeking to unpack the reasons behind global inequity and contribute to development of mitigating strategies, constitutes a continuation to that genre of research. This, together with the imperative for the International Paralympic Committee as advocates for disability rights to address inequity, creates the case for comparative studies sensitive to the experiences of athletes and organizations in sharply different economic and cultural contexts. In the end, and as we have intimated throughout, we strongly support and encourage future comparative studies within a Paralympic context building upon the existing studies produced both inside and out of the sport domain.

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