Full length article

Equity-based sustainability and ecocentric management: Creating more ecologically just sport organization practices

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A B S T R A C T

Recognizing the shared responsibility all entities with a vested interest in keeping the Earth habitable possess, the authors propose ways in which sport organizations can take action by incorporating ecocentric management principles within their organizational practices and thus become more ecologically just. First, by drawing upon the tenets of the systems thinking paradigm and the four levels of thinking model, the underlying beliefs and values guiding current practices within sport organizations are identified. Next, the authors offer a series of propositions to suggest that by adopting an equity-based perspective, recognizing the interdependent relationships between humans and the natural environment, and acknowledging the manner in which sport organizations hinder the opportunities of the natural environment to thrive, sport organizations can contribute to the health of the planet and all of its inhabitants through their own organizational practices. Additionally, sport organizations can also serve as ecologically just exemplars for organizations in other industries to emulate.

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1. Introduction

Over the past two decades, sport and sport organizations have taken a great deal of responsibility in addressing their past, current, and future impact on the planet (McCullough, Pfahl, & Nguyen, 2016). Indeed, many sport organizations, sport leagues, athletic departments, and the like are now implementing environmental initiatives (Trendafilova, Babiak, & Heinze, 2013; Trendafilova, McCullough, Pfahl, Nguyen, Casper, Picariello, 2014). Within the United States, for example, the four major sports leagues have partnered with a national environmental group that actively advocates for the protection of natural resources (i.e., National Resource Defense Council (NRDC)). A global example, the Federation Internationale de Football Association (FIFA) has been involved with environmental protection programs for nearly a decade. Regional and local sport leagues and organizations have also formed partnerships with the intent of implementing pro-environmental strategies (Trendafilova, Kellison, et al., 2014Trendafilova, Kellison, & Spearman, 2014). Despite these efforts, however, the climate continues to change, species continue to become extinct, sea levels continue to rise, temperatures continue to fluctuate, and so on (e.g., Bellard, Leclerc, & Courchamp, 2014; Urban, 2015). Thus, there lacks an adequate focus on the underlying reasons for these changes in the natural environment and the role that sport organizations play in these changes.

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Most environmental initiatives are based on the tenets of environmental justice. The Environmental Protection Agency (EPA) defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to development, implementation, and enforcement of environmental laws, regulations, and policies" (Environmental Justice, 2016, p. 1). Fair treatment, in this context, refers to the way in which no group of people should be disproportionately impacted by negative environmental consequences or the industrial, governmental, and commercial policies in place to regulate the environment. A substantial portion of the environmental justice literature within the United States has focused on the disproportionate distribution of environmental risks and negative consequences between races and socioeconomic classes (i.e., environmental injustice or environmental racism; see Bullard, 2000; Davies, 2017; Turner, 2017).

Whereas environmental justice is concerned with the impact of environmental change and consequences as it relates to humans, ecological justice is much more inclusive. Recognizing that environmental harms threaten the ways of life for both human and nonhuman animals, the traditional focus of ecological justice is that of fair and equitable distribution of environments to all of earth's inhabitants: plants, animals, organisms, and ecosystems (Low & Gleeson, 1998; Schlosberg, 2003). Simply put, ecological justice is being just to nature. We consider nature, in this context, as "the physical and biological world not manufactured by people" (Sandifer, Sutton-Grier, & Ward, 2015, p. 2), and people primarily value it in two, often conflicting, ways – intrinsically and instrumentally. The instrumental value of nature relates to the value that humans assign to and the benefits received from ecosystems, or communities, in which all living and nonliving entities are linked (Pelenc, Lompo, Ballet, & Dubois, 2013). Intrinsic value refers to valuing something for its inherent worth (Comberti, Thornton, Wyllie de Echeverria, & Patterson, 2015; Pelenc et al., 2013). Humans are an integral component of ecosystems and almost entirely dependent upon nature for survival; yet, they often fail to recognize the intrinsic value of the natural world (Pelenc et al., 2013). This is a profound shortcoming, particularly to the extent that human behavior negatively impacts the ecosystems in which they live.

Researchers once focused on the natural environmental and natural geological changes occurring on the planet (i.e., the Holocene epoch; Crutzen & Stoermer, 2000). As a result of excessive human consumptive behaviors, researchers now view the current era as Anthropocene and thus focus on the central role humans have played in the profound environmental, geological, and overall planetary changes of the past two centuries (Crutzen & Stoermer, 2000; Steffen, Crutzen, & McNeill, 2007). While specific individuals, groups, and communities cannot be identified as solely responsible for these changes, every person on the planet bears some degree of responsibility for correcting them if the Earth is to remain habitable. Referred to as shared responsibility, this type of responsibility stems from "belonging together with others in a system of interdependent processes of cooperation and competition (Young, 2006, p. 119).

While the issue of shared responsibility has not been applied to issues other than physical and emotional harm and injustice within the sport context (Sartore-Baldwin, McCullough, & Quatman-Yates, 2017), we extend its application to issues of sport organizations and ecological justice. Several authors have focused on the responsibilities that sport organizations possess in relation to environmental sustainability, yet there has been an overwhelming focus on social and economic motivations, not the ethical motivations. Thus, drawing upon the profound impact that sport has amongst individuals, groups, communities, and beyond (see Spaaij, 2009), the shared responsibility, as discussed in this work, refers to the ethical responsibility sport organizations, sport spectators, sport consumers, and so on have in addressing justice to the natural environment. First explaining the interdependent relationship between humans and the natural environment, we employ systems thinking to identify the underlying ideologies and practices that have established and maintained ecological injustice in society-at-large and within sport. Next, specifically focusing on the ecological injustices within, and the result of, sport and sport organizations, we propose that by focusing on equity-based sustainability, sport organizations can adopt ecocentric management principles. Finally, we present the capabilities approach to justice as an essential moderator to the attainment of equity-based sustainability and more ecologically justice organizational practices.

2. Conceptual framework

Sport is a unique context with a profound reach (Spaaij, 2009). Culturally, sport is entwined with society such that fans psychologically attach themselves to teams and players and physically dedicate a great deal of time and money to its consumption. Environmentally, sport's impact is evident in the sizable ecological footprint that results from sport organization practices. As Casper and Pfahl (2015) pointed out, the effects of the sport experience (e.g., automobile emissions, food waste, water usage, energy usage) highlight the necessity to not only create change, but to also use sport as a platform in which change is evidenced. This is similar to Schmidt (2006), who noted that sport can both reduce its ecological footprint and raise ecological awareness. Indeed, several authors have investigated sport from these vantage points. To date, sport management researchers have not investigated the underlying complexities that have maintained and supported continued environmental degradation despite efforts to correct it. Recognizing this, we offer a 'new way of thinking' about social-ecological systems by employing the systems thinking paradigm within the sport context (Bosch, Maani, & Smith, 2007, p. 1).

2.1. Systems

Systems exist as two or more working parts that have an effect on one another and the operations of the system as a whole (Ackoff, 1994). Systems cannot be separated from these parts, as they are fundamental to the system's existence and

functioning. Ackoff identified three basic types of systems: mechanical, organismic, and social. Mechanical systems can be either open or closed, and operate independent of choice or purpose. Examples of mechanical systems include a clock or automobile. Organismic systems are open, possess at least one purpose, and can only be understood in relation to the external variables that can affect the systems functioning (i.e., its environment). Social systems are open, have purposes of their own, and are themselves part of larger systems that also possess purposes of their own, the likes of which place external pressure on the social system. Likewise, the essential components within social systems have purposes of their own, such that internal pressure is placed upon the social system to perform well. Social systems exist as organizations, institutions, and larger societies (Ackoff, 1994).

The Earth was once viewed as a mechanistic system, an open mechanistic system, but mechanistic nonetheless (Ackoff, 1994). Over time, however, scientists have acknowledged the planet as an organismic system in which many social systems exist. According to Gaia theory, for example, Earth exists as a harmonious biosystem in which organisms and the environment exist as a single, self-regulating system (Lovelock, 2003). As such, the biologically diverse organisms within this system adapt for survival within changing environments to maintain homeostasis. As Lovelock (2007) noted, however, while Gaian theory emphasizes the ability of the planet to adapt to change, it also identifies that humans' actions have threatened the stability and inhabitability of the planet. Thus, while the planet will adapt, it may do so in such a manner that humans and other life forms can no longer exist. This current status of the Earth and its climate presents one of the most complex problems that individuals, institutions, societies, and, most pertinent here, organizations must confront (Lovelock, 2007).

Consistent with Ackoff's (1994) characterization of systems, sport organizations exist as social systems with goals and purposes. Likewise, they are nested within larger social systems that possess their own goals and purposes (Ackoff, 1994). While the specific purposes and goals of sport organizations vary by organizational mission, in general sport organizations exist to produce goods and services, serve communities, or make a profit. Further, they do so within the larger system of the natural environment. As such, sport organizations are more accurately parts of social-ecological systems in which an interdependent relationship between humans and nature exists (Fischer et al., 2015). Social-ecological systems highlight the manner to which human behavior is integral in shaping ecosystems. Reciprocally, humans are dependent upon ecosystems for their well-being and societal development. Thus, socio-ecological systems act as complex adaptive systems dependent upon reciprocal feedback (Fischer et al., 2015).

As social-ecological systems, one could argue that the natural environment is the primary stakeholder of sport organizations (Mallen & Chard, 2011). Inherent in this argument is the suggestion that, as inhabitants, humans have a vested interest in maintaining a stable living environment in which to enjoy sport. Indeed, some action has been taken by sport organizations to address the increasing stresses placed on the planet, but these actions are primarily reactive in nature and seek to establish legitimacy and competitive advantage (Babiak & Trendafilova, 2011). Thus, they do not address the underlying systemic structures and mental models that promote the excessive consumption and exploitation of Earth's natural resources. This is better explained by employing systems thinking.

2.2. Systems thinking

While traditional approaches to addressing complex problems within a system tend to focus on one component at a time, the relationships, interactions, and interdependencies that exist between all system components must be studied for accurate assessment (Bosch et al., 2007). Systems thinking represents one method to do so. Systems thinking is a critical way of viewing systems holistically and thus allows for a paradigmic shift in understanding the underlying complexities of social, economic, business, natural, and human systems (Bosch et al., 2007). Perhaps more importantly, systems thinking helps people understand these systems as they relate to real-world problems. Scholars have applied this perspective to a variety of systems, including the management of natural and human systems and the complex problems surrounding the sustainability of finite natural resources and other social-ecological dilemmas (Bosch et al., 2007). Others have employed systems thinking within the management context as a means to promote organizational learning (Maani & Cavana, 2007; Senge & Sterman, 1992).

Systems thinking is an abstract, yet structured, cognitive endeavor in which the focus lies on the relationship between the whole, its parts, and the spaces in between (Cabrera, Colosi, & Lobdell, 2008). One of the most common tools employed within systems thinking is Maani and Cavana's (2007) four levels of thinking model. Visualized as an iceberg, the authors identified the different ways in which humans interact with the world around them. The first level is termed the events level and is represented by the visible tip of the iceberg. At this level, people notice and become aware of some kind of change that has occurred locally, nationally, or globally. Within organizations, managers tend to respond to this level in a reactive manner and fail to recognize that events are almost certainly symptoms of deeper issues. Thus, quick fixes are put into place, but because the root cause has not been identified, events reoccur and reemerge.

The submerged portion of Maani and Cavana's (2007) figurative iceberg represents the remaining levels of the model. Patterns, the next level of thinking, are just below the surface of the water, indicating that they are linked to events. The result of repeatedly occurring sets of events (i.e., data points) that can be linked together, patterns demonstrate change across time. The next level, systemic structures, represents a deep level of thinking in which the interaction between patterns and trends is examined for causal relationships. It is also at this level that relationships between components of the system are revealed as inhibitive, restrictive, or supportive. The deepest level of thinking is the level in which the reason why things work the way they do is explained. Specifically, the mental model level represents the values, beliefs, and assumptions that form the basis

individual behavior. This level of thinking influences the design of system structures, rules for behavior, and how individuals go about their daily lives.

The application of systems thinking and Maani and Cavana's (2007) four levels of thinking model to the sport context are best explained with an example. In March of 2014 the National Wildlife Federation (NWF) released a report entitled, *Mascot Madness: How Climate Change is Hurting School Spirit*. This report detailed how the effects of climate change are adversely impacting the fate of mascots that represent schools, like the University of Florida (Gators), Kansas State University (Wildcats), the University of Memphis (Tigers), and even The Ohio State University (Buckeyes). Phenomena like extreme weather, warming temperatures, rising sea levels, and extreme droughts have put the long-term survival of mascots like the University of North Carolina's ram, Baylor University's bear, the University of Michigan's wolverine, and Syracuse University's orange into question by threatening their habitats. Thus, calling attention to the potential extinction of specific animals and plants represents the noticeable changes or events that are symptoms of a larger issue facing the planet – climate change.

By linking the impact of climate change across plant and animal mascots whose habitats are threatened by planetary changes, one can identify a pattern or trend. This pattern is associated with excessive consumption of the Earth's natural resources, and the inability of nature to keep up with human demand. Organizations often start to take notice after events and patterns have been established, and, in the case of things like climate change, events and patterns are at least partially responsible for shaping the sustainability and environmentally conscious practices. For example, in response to dwindling natural resources, sport organizations across the world have instituted environmental sustainability initiatives with the intent of reducing their impact on the planet (Trendafilova, McCullough, et al., 2014). Governmental policies and social pressures to protect the Earth's environment have guided these efforts. The policies and pressures represent systemic structures that promote the tenets of environmental justice. Thus, the belief systems or mental models from which these systemic structures, trends, and events stem associate the use of natural resources with human needs, wants, and motives. As such, most organizational sustainability initiatives are anthropocentric, or human-centered.

By employing systems thinking through the four levels of thinking model to the issues of climate change and sport mascots, we provide more thorough insights into the issues and their causes. Specifically, because a holistic approach is used to identify the events, patterns, and systemic structures surrounding the issues, the underlying, contextually-pertinent beliefs upon which the issues are based can also be identified. In the aforementioned example, we can discuss the underlying beliefs that have led to the threatened existence of multiple components of the natural environment in terms of the predominant values society holds. More specifically, the underlying beliefs of anthropocentrism (i.e., human-centeredness) present within organizations, in general, and sport organizations, in particular, highlight the ways in which contemporary organizational practices fail to look beyond the interests of humans (Shrivastava, 1995). Recognizing this within sport organizations, we offer the following proposition:

Proposition 1. Sport organization practices are focused on the interests of humans and, thus, are human-centered.

2.3. Anthropocentrism

Anthropocentric attitudes represent one's valuing nature because of the benefits it can provide humans (Thomas & Barton, 1994). These attitudes prevail in most cultures due to the hierarchically structured social institutions and belief systems that have established the norm of human domination over the natural world and all life forms within it (Cudworth, 2005; Schlosberg, 2007). Likewise, they prevail within the management principles of contemporary businesses (Cunha, Rego, & Vieira da Cunha, 2008; Iyer, 1999; Purser, Park, & Montouri, 1995; Shrivastava, 1995). The anthropocentrism that underlies traditional management theory is identified by Shrivastava (1995) as a deeply rooted, "fundamental limitation of the traditional management paradigm" (p. 126). Recognizing this, Shrivastava and other management scholars have noted that contemporary management practices have contributed greatly to past and present ecological problems and will continue to do so in the future if change does not occur (Gladwin, Kennelly, & Krause, 1995; Purser et al., 1995; Starkey & Crane, 2003). This is not to blame business organizations exclusively for anthropocentrism, of course. Rather, because organizations operate within larger, anthropocentric societies, it is somewhat logical that business and managerial practices across all industries, including sport, would follow suit.

Against the backdrop of societal anthropocentrism, Purser and colleagues (Purser et al., 1995) propose two manifestations of anthropocentrism within modern organizations. The first manifestation, technological knowledge, refers to the way knowledge is dichotomized within organizations: objective facts and subjective values. According to Purser et al., management relies too heavily on the former, which results in the intrinsic value of nature being a secondary concern (Purser et al., 1995). The second manifestation of anthropocentrism is the egocentric orientation present within traditional organizations. From this perspective, both individuals within organizations and the organizations themselves serve their needs, predominantly financial, first and foremost and give no consideration to the effects of their practices on the outside world. Thus, the natural environment and ecosystems within it are valued as resources from which humans can benefit.

A primary consequence of human-centeredness is the relegation of nonhuman life forms to the periphery, both culturally and physically (Crist & Kopnina, 2014). The focus on the differences between human and nonhuman life forms has led humans and their attributes to be exalted and all other life forms found deficient by comparison. Thus, there is an established hierarchy of life on Earth (Crist & Kopnina, 2014). This hierarchy is evident when examining the manner to which natural

landscapes have been destroyed and the nonhuman animals within them "killed, persecuted, enslaved, forced to flee to ever more remote places, and driven to regional and total extinction" (Crist & Kopnina, 2014, p. 388). Indeed, humans are increasingly dominating the natural world and failing to recognize their shared responsibility in assuring the livelihood of not only humans, but also all life forms that inhabit Earth.

2.4. Anthroparchy

Cudworth (2005) referred to the institutions, processes, and practices through which human domination over nature is maintained and expanded exist as anthroparchic. Further, Cudworth (2005) suggests that, within anthroparchic cultures, species domination intersects with gender, race, ability, social class, and other socially constructed systems of dominance. Anthroparchy represents a system of complex relations through which human domination over the natural world is normalized and differs from anthropocentrism in that it moves beyond the idea of human-centrism to address the "severity of violence and exploitation" humans inflict on the natural environment (Calvo, 2008, p. 34). Certain contexts typify anthroparchy through the relationships that humans and nature have within them. Cudworth (2011), Cudworth (2014) suggests these contexts involve five primary areas: production, domestication, polity, violence, and anthropocentrism. Production refers to the relationships formed with nature as humans produce needed items such as food and fuel. As Calvo (2008) notes, modern industrialization has greatly impacted this relationship. Domestication and reproduction of plants and animals involves the breeding of plants and animals for specific purposes and can refer to the actual and symbolic beings that are safely domesticated or dangerously not. The third area, the political, involves the institutional entities that can create, perpetuate, and change systemic domination either directly or indirectly. The fourth area is systemic violence, the likes of which can impact animals just as it does humans. Lastly, relations within an anthroparchal society are human-centric and, as such, categorize non-human animals as others.

We further explore the domination of humans over all other life forms within sport by examining the aforementioned five areas and the social relations within them. For example, humans use natural resources, such as wood and animal hide, for the *production* of sport equipment, facilities, and venues. Likewise, non-human animals are used to create animal sport as a whole. Plants and animals are *domesticated* and reproduced by humans for the specific purposes of sport participation and consumption. For instance, racehorses are often selectively bred from championship bloodlines. Specific types of grass are bred for the racetracks on which these horses will compete, as well as for golf courses and other sporting venues. Various forms and degrees of violence are used by humans to control animal athletes, as electric cattle prods, spurs, whips, and crops are all used to elicit desired behaviors. Animals are also killed and dismembered to make the aforementioned sport equipment (e.g., baseball gloves and saddles).

Though the safety and well-being of human athletes are of primary concern and regulated by *governmental laws and organizational policies*, the same is not ensured for animal athletes. Animal athletes have no voice and cannot report abuses and mistreatment. As a result, there is no assurance that the rules and regulations established to protect animal athletes, the likes of which are lacking, are being followed, nor is there assurance that rules and regulations are uniform across states and venues (e.g., horse racing, see Busch, 2016). With regard to the natural environment, current state and federal laws seek to regulate things like sport stadium planning, construction, and development (Grant, 2014). Likewise, many sport organizations have implemented policies with the intent of reducing environmental harm. Despite these efforts, the sheer magnitude of most sporting events suggests that they are inadequate in countering the massive carbon emissions produced (Dolf & Teehan, 2015; Grant, 2014). Thus, humans continue to use the environment and all living entities housed within it to satisfy human interests.

Within anthroparchical cultures, there are three primary types and practices of power that represent the different degrees of human domination: oppression, exploitation, and marginalization (Calvo, 2008). Oppression refers to the extreme degrees to which humans apply dominating power over other plant and animal species. Exploitation refers to the use of nonhuman animals and natural environments as a resource from which humans benefit. Marginalization is akin to anthropocentrism, as it refers to the rendering of species to the extreme periphery thus making them nearly insignificant. Through various levels and degrees of oppression, exploitation, and marginalization, human domination is reaffirmed in contexts where animals and their habitats are used to produce goods and services and where animals are domesticated and reproduced at will and controlled through violence. Further, laws and social norms exist to support, and in some cases contest, these practices. While the majority of discussions about anthroparchy have focused on the agricultural industry (e.g., Calvo, 2008; Cudworth, 2011, 2014), the central tenets of anthroparchy are present within multiple other industries, including the sport industry. Thus, we offer the following proposition:

Proposition 2. The result of human-centeredness, production, domestication, violence, and policies, sport organization practices are anthroparchic.

2.5. Equity-based sustainability & ecocentric management

In contrast to anthroparchic attitudes and values, ecocentric attitudes represent valuing nature for nature's sake, and the belief that humans do not exist separate from nature and are therefore intertwined with nature's survival (Thompson & Barton, 1994). An ecocentric approach to sustainability and sustainable development recognizes the importance of

protecting the health of Earth's ecosystems and all living entities housed within them (Imran et al., 2014). From this perspective, non-human beings have no less right to life than humans, and as such, sustainability involves the equitable protection of all life. Thus, rather than viewing ecosystems, non-human animals, and the environment as resources and objects that exist independent from each other and are needed to fulfill the needs of the current and future generations, these entities are considered part of a larger, working system in which the needs of all living entities must be met to ensure survival (Imran et al., 2014).

Ecocentric management mirrors the tenets of ecological justice in that the fundamental concern is that all living things should not be used as humans see fit, but should be recognized as possessing moral significance and intrinsic value and thus, not be harmed (Bosselman, 2006). Such a position is not to suggest that humans not be considered, however, as the dominant concerns of ecocentrism are the recognition of both human and non-human needs, the recognition of the symbiotic relationship humans have with nature and its inhabitants, as well as the recognition of the necessity to protect threatened ecosystems (Iyer, 1999). Organizations operating from the ecocentric paradigm view sustainability as a key concept, view the planet as the ultimate stakeholder, hold the care and integrity of nature as their focus, and recognize their role in ensuring ecosystem survival (Cunha et al., 2008; Shrivastava, 1995). They acknowledge the impact they have on their surroundings, local ecosystems, and the planet as a whole and do not view nature as an externality (Cunha et al., 2008). Business decisions, actions, and policies are carried out with the purpose of sustaining the integrity of the environment, educating consumers about ecocentric practices, and creating long term sustainable growth while minimizing environmental harm (Iyer, 1999; Shrivastava, 1995). Incorporating ecocentric management principles thus includes shifting the goals, values, functions, and processes of organizations (Shrivastava, 1995).

Organizations working from an ecocentric perspective have the primary objectives of increasing quality of life and developing social equity for humans, nonhumans, and the habitats in which they live (Stubbs & Cocklin, 2008). While equity, and by extension justice, are often considered issues of fair distribution, distribution-based theories of justice often fail to contextualize distribution patterns (Young, 1990). As such, the conditions underlying poor distributions are not considered. As noted by Young (1990), "while distributional issues are crucial to a satisfactory conclusion of justice, it is a mistake to reduce social justice to distribution" (p. 1). Rather, Young argues that distributional injustice is a product of the social structures, cultural beliefs, and institutional contexts that promote and maintain the lack of recognition that exists between groups. More specifically, injustices occur due to the institutional domination and oppression present within society that privilege, marginalize, and fail to recognize others (e.g., anthroparchy).

Subsequent researchers have built upon Young's (1990) work to highlight the way in which recognition is a fundamental component of justice. Schlosberg's (2007) use of recognition in reference environmental and ecological justice is most pertinent here. Schlosberg argues that the ways of life of nonhumans, certain groups of humans, and the natural environment of which all are inhabitants are being threatened by injustice because of a lack of recognition. Specifically, due to a lack of recognition, the status of these entities is degraded in three ways: cultural domination, patterns of nonrecognition that render them invisible, and disrespect (Fraser, 1998). By way of this devaluation, these entities are not provided the opportunities to flourish and thrive. Thus, they are denied the ability to do what they want to do and be what they want to be, or their capabilities to function (Nussbaum, 2006; Sen, 1980). Recognition, from this perspective, is acknowledging the capabilities and functionings of those within disenfranchised groups and communities (Nussbaum, 2006; Schlosberg, 2007).

Including recognition, capabilities, and functionings as components of ecological justice and by extension, ecocentric management, emerges when working from the capabilities approach to justice (Nussbaum, 2006; Schlosberg, 2007; Sen, 1980). The focus of this approach is the well-being, integrity, and dignity accorded to all living entities or, as Nussbaum (2004) noted, the basis for the capabilities approach is the desire to "see each thing flourish as the sort of thing it is" (p. 306). The capabilities approach has been adopted when recognizing and considering injustices for humans (Nussbaum, 2006; Sen, 1980), nonhuman animals (Nussbaum, 2004; Nussbaum, 2006; Schlosberg, 2003) and the ecosystems in which all life forms exist (Schlosberg, 2007). To date, however, it has not been directly used in conjunction with the ecocentric management of sport organizations—a profound oversight, as integrating recognition, capabilities, and functionings with the key concepts and goals of ecocentric management (i.e., sustainability and quality of life; Cunha et al., 2008; Shrivastava, 1995) can lead to more ecologically just organizational practices. In the following space, we offer a series of propositions through which this can be accomplished in relation to a fundamental aspect of ecocentric management – sustainability (Cunha et al., 2008).

The concept of sustainability emerged from the conflicts among industrialization, consumerism, and the environment (Earnshaw, 1999). Specifically, as the world became more industrialized and the environment endured increased destruction, organization leaders needed to consider environmental issues, as well as social and economic issues, in their business practices. Prior to this time, the environment was believed to have infinite regenerative capabilities, which suggested that future generations of humans would experience the same infinite resources as their ancestors. The inaccuracy of this assumption became apparent as the exploitation of the Earth's resources began to exceed the Earth's regenerative abilities. As a result, the complex nature of the ecological, economic, and social dimensions of sustainability emerged, as did the concept of sustainable development.

Several authors have submitted definitions of sustainable development, and Gladwin et al. (1995) identified five primary components. The first component, inclusiveness, "embraces both human and nonhuman systems, near and far, in both the present and the future" (p. 878). Connectivity, the second component, highlights the "world's problems as systemically interconnected and interdependent" (p. 879), and the third component, equity, refers to the fair distribution of resources

within and between generations and across species. The final two components, prudence and security, highlight the necessity for vigilance in pursuing sustainable development amongst unpredictable and complex systems.

Haughton (1999) extended upon Gladwin et al.'s (1995) work by focusing on one identified component of sustainable development, equity. Specifically, Haughton identified five interconnected equity principles that guide the process of sustainable development. These principles can be adopted to address both short-term, local issues and/or long-term, global issues. The first two principles, intergenerational equity or futurity and intra-generational equity refer to establishing better equity across and within generations, respectively. Specifically, intergenerational equity is concerned with the distribution of resources from one generation to another and intra-generational equity is concerned with the processes by which resources are distributed within the current generation. Thus, intergenerational is long-term oriented and intra-generational is concerned with the short-term. The third principle, geographical equity, involves considering the impact of local decisions and actions at the global level. Thus, this principle is concerned with both the short-term, local issues and the long-term, global issues. Haughton also refers to this as transfrontier responsibility. The fourth principle, procedural equity, also discussed as the participation principle, is primarily focused on short-term, local issues as it focuses on the right of access to information for all parties impacted by negative environmental impacts. The fifth and final principle, inter-species equity, is geared toward addressing long-term, global issues. Interspecies equity "places the survival of other species on an equal basis to the survival of humans" and emphasizes the importance of preserving ecosystems and retaining biodiversity (p. 236). While Haughton's (1999) equity principles do not exist mutually exclusive from one another, sustainability's human-centered history has led some principles to receive a great deal more attention and action than others. Adopting an equity-based perspective, however, requires that the interests of all be incorporated because of the interdependence that exists between nature and humans.

Indeed, by adopting an equity-based approach to sustainability, socio-ecological systems must be acknowledged, as must inter-species equity (Earnshaw, 1999; Fischer et al., 2015). Accordingly, recognizing the interdependent relationship and similarities between humans and the environment is the first step for organizations seeking to incorporate ecocentric management principles. Thus, managers must consider the value (both instrumental and intrinsic), interests, and needs and wants of nature and all of its inhabitants. For instance, researchers suggest that non-human animals value many of the same fundamental rights that humans possess (Earnshaw, 1999). Thus, just as humans value life, liberty, and the pursuit of happiness, so too do animals value their lives, their freedom, and their friendships and families. Further, animals also wish to live free from harm, fear, and exploitation, and, while not identical to humans, non-human animals experience and enjoy their own quality of life and wish not to suffer physically, emotionally, and psychologically (Broom, 2016; Earnshaw, 1999; Veenhoven, 2000).

Beyond the fundamental function of providing the air beings breathe, a number of researchers have demonstrated that human contact with nature provides physical, cognitive, and psychological benefits (e.g., Sandifer et al., 2015). Likewise, humans benefit greatly from the biologically diverse organisms within nature. Thus, instrumental value is quite evident. Less evident are the intrinsic benefits of nature, as they are not present to benefit humans. One way of viewing intrinsic value, however, is as the value beyond instrumental value (Vucetich, Bruskotter, & Nelson, 2015). For example, the instrumental value of nature represents the various functions of nature from which humans benefit, not nature itself. These functions could not occur without the presence of nature, thus, nature's existence is its intrinsic value (Vucetich et al., 2015). Thus, instrumentally, nature is needed for humans to benefit and intrinsically, nature is needed for these benefits to occur. Recognizing this as the first step in adopting equity-based sustainability, we offer the following proposition:

Proposition 3. Sport managers can adopt an equity-based approach to sustainability by first recognizing the interdependent relationship and similarities between humans and the environment.

Schlosberg (2007) noted that the quality of life for nonhuman animals, including humans, is dependent upon the environment in which they are living. Thus, if Earth's individuals, groups, and communities are to flourish, the natural environment and the systems in which they live must also flourish. Flourishing, in this context refers to "contributing to the set of relationships that make up, and support, the system as a whole" (Schlosberg, 2007, p. 148). Flourishing is therefore accomplished by considering the capabilities of larger systems, as they contribute to the capabilities of individuals and groups. When the capabilities, functionings, and flourishing of these larger systems are inhibited or interrupted, so too are the capabilities, functionings, and flourishing of the individuals and groups within the system. This inhibition or interruption is an issue of ecological justice for organizations to consider.

Organizations working from the ecocentric paradigm recognize nature's intrinsic value, consider it within managerial decision-making, and focus on ways in which organizational practices can allow nature to function and thrive. Thus, they must recognize how sport organization practices impact the capabilities and functioning of the natural environment by examining their impact on the natural environment. This is the second step in adopting ecocentric management principles. For example, sport stadiums have a negative environmental impact during both their initial construction and their usage (Grant, 2014). Stadiums use an excessive amount of water, create vast amounts of waste, and their patrons create mass quantities of vehicular air pollution within very concentrated areas (Grant, 2014). Across leagues, the combined carbon footprint per year of the 'Big Four' United States leagues (i.e., Major League Baseball (MLB), National Hockey League (NHL), National Basketball Association (NHL), and National Football League (NFL)) is over 35,000 metric tons of carbon dioxide (Waste Management, 2014). Indeed, we argue that these impacts on the natural environment are limiting nature's capabilities and functionings. Thus, we propose:

Proposition 4. Sport organizations can adopt an equity-based approach to sustainability by next examining the ways in which organizational practices impact the capabilities and functionings of the natural environment.

While some sport organization leaders have taken measures to reduce their ecological impact (e.g., Dolf & Teehan, 2015), they have not done enough. From a systems thinking perspective, sport managers are reacting to events and patterns and not addressing the structures and underlying issues that have led to and maintain environmentally destructive behaviors. Further, they have not recognized themselves and their anthroparchic norms as one of these structures and thus, an impediment to change. Organization leaders must therefore consider their impact on nature, as it not only has an impact on the capabilities and functionings and the natural environment, but also the individuals, groups and communities housed within it (Schlosberg, 2007). Incorporating ecocentric managerial principles into their organizational structure and culture, as well as into their everyday practices, members of sport organizations can not only start the process in which they examine their actions, but also be drivers of change and role models for organizations in other industries.

The final step in the incorporation of ecocentric management principles into sport organizations involves adapting organizational practices, policies, and initiatives such that they challenge traditional management ideals and recognize that all life form are connected and deserve the opportunity to flourish. Thus, this includes challenging anthroparchical norms. In doing so, an emphasis should be placed on not only the responsibility that organizations have in being just to nature, but also the responsibilities of stakeholders to do the same, as perceived responsibility has been found to be a predictor of ecological behavior (e.g., Kaiser & Shimoda, 1999). Abstractly, sport managers will focus on sustainability as their key concept: view the planet (both human and nonhuman) as their key stakeholder, consider the organization part of an ecosystem, and value the natural world for its presence, not its resources (Cunha et al., 2008). More specifically, leaders will work to reduce organizational consumption of virgin materials, reduce their use of nonrenewable forms of energy, eliminate emissions, and ultimately reduce the life-cycle costs (Shrivastava, 1995). Life-cycle costs refer to the various costs associated with a product or service and may take the form of a loss of environmental quality (Shrivastava, 1995). Further, equity-based sustainability is considered a decision-making strategy. As such, we propose:

Proposition 5. Sport organizations can adopt ecocentric management principles by modifying organizational practices in accordance with the tenets of equity-based sustainability.

One specific way for sport organizations to integrate ecocentric management principles into their practices is by working with organizations whose purpose is to promote ecological justice. As an example, after being awarded the Olympic Games in 2009, the city of Rio de Janeiro was faced with the task of addressing the hundreds of thousands of animals located in the areas in which venues were to be built. While over three quarters of the humans displaced by the Rio Olympic Games had found housing through Brazil's public housing program, Minha Casa Minha Vida (MCMV), the safety and well-being of the animals was far less certain. Recognizing this, the non-profit organization World Animal Protection (WAP) reached out to the Rio 2016 Olympic Games Organizing Committee and offered support for successfully managing the animals near Olympic venues.

Taken together, this work presents a conceptual model based on the tenets of ecological justice and the premise of shared responsibility (see Fig. 1). Specifically, we submit that by employing Maani and Cavana's (2007) four levels of thinking model, the underlying, human-centric values, beliefs, and assumptions that guide current management practices within sport organizations can be identified. Further, these values can be identified as anthroparchic. By recognizing the complex ways in which humans and the natural environment are intertwined, adopting an equity-based approach to sustainability, and reviewing current organizational practices in relation to their negative impact on the natural environment, sport organizations can work toward adopting ecocentric management principles. The implications of this series of propositions are presented below.

3. Discussion

The purpose of this work is threefold. First, by extending the notion of shared responsibility to the current, impaired, state of the planet, sport organizations are identified as part of a larger system in which ecological justice is being ignored. Second, through systems thinking, we identified and discussed the underlying belief systems from which the excessive consumptive
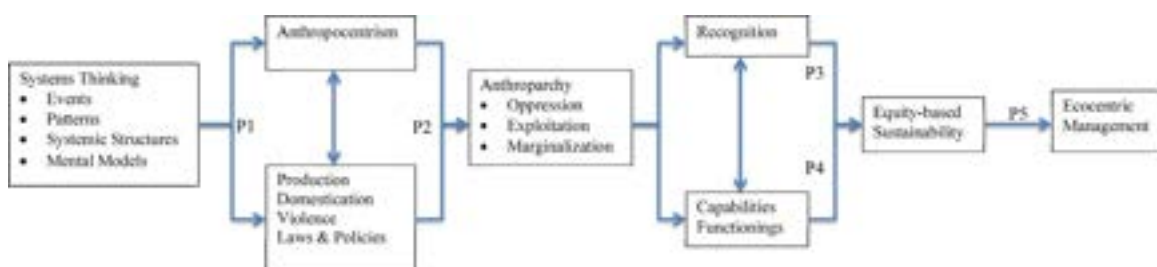
Fig. 1. Systems thinking, equity-based sustainability, and ecocentric management in sport organizations.

behaviors arise. In doing so, we identified sport organizations as a vital component in the maintenance of anthroparchal norms. Lastly, we developed an integrated model, whereby we highlight the ways in which ecocentric management principles and equity-based sustainability within sport organizations can be a way for sport organizations to create change.

The biggest challenges to adopting ecocentric management principles are the multiple forces that reject them (Cunha et al., 2008). Perhaps the most notable force is that of the institutionalization of anthropcentric and anthroparchical norms within organizations, in general, and sport organizations, in particular. Institutionalization refers to the ways in which organizations unquestionably accept "how things are done" (Scott, 1987). According to institutional theory, prolonged acceptance and subsequent internationalization of unquestioned practices and the meanings that underlie them, leads to a profound reluctance to change (Zucker, 1977). The institutional environment represents a context in which implicit rules guide organizational practices. Key entities imposing these rules within this institutional environment are the "government, professional associations, public opinion, or the media" (Bansal, 2005, p. 202). There is some evidence to suggest, however, that environmental and ecological groups can influence organizations to engage in various forms of ecological responsibility (Sharma & Henriques, 2005). Revisiting the aforementioned example, with the support of WAP, The Rio de Janeiro Olympic Games Organizing Committee partnered with Rio de Janeiro City Hall to create the "Ambrace Um Amigo" (i.e., Hug a Friend) campaign ("Rio 2016 and Rio de Janeiro City Hall," 2016"Rio 2016 and Rio de Janeiro City Hall," 2016). The purpose of this campaign was to find adoptive homes for the stray animals present around Olympic venues. WAP trained Olympic operations teams on how to properly handle stray cats and dogs and educated members of local communities about responsible pet ownership (Fantegrossi, 2016). WAP and the Olympic Organizing Committee have also built a shelter specific for the animals living on Olympic venue sights.

It is worth noting that not all of the sustainability efforts of the Rio Olympic Games were successful and, as a result, critics have scrutinized the Games' legacy. Specifically, the Rio Olympic Games promised certain short and long term sustainable goals (i.e., legacy goals) in their bid, but they have fallen short in certain areas (Geeraert & Gauthier, 2017). Against this backdrop, however, it is also worth noting that, while only one example and one event, the influence of the WAP in challenging the way things are typically done is significant. WAP's primary goal in working with the Rio Olympic Games Organizing Committee was to save the animals impacted by the Olympic Games (World Animal Protection, 2016). According to Rosangela Ribeiro, the Veterinary Program Manager with WAP, they also hoped to set an example for future sporting events by calling attention to the ways in which these events can cause distress amongst local animals and by proving that these animals can be successfully, safely, and humanely managed. Historically, animals located in regions destined to be Olympic venues, as well as other sporting mega-events, had not fared as well, and this appears to be how things were done (Manfred, 2014; World Animal Protection, 2016). For example, in preparing for the FIFA World Cup in 2014, the Humane Society International (HSI) accused the Brazilian government of gathering and killing thousands of stray dogs from the streets. These street dogs, also referred to as community dogs because communities cared for them, were not given an opportunity to be rescued, treated, and adopted ("Recife urged to stop," 2014). Similar events occurred in preparation for the 2014 Winter Olympic Games in Sochi, Russia. The Russian government hired a pest control company to poison thousands of stray dogs to make the streets more tourist friendly (Manfred, 2014). According to the HSI, animal culls or purges of stray animals prior to international sporting mega-events are not uncommon (Evans, 2014). While documentation is sparse, one of the earliest accounts can be found in Guatemala when hundreds of stray dogs were reportedly poisoned in 1921 in preparation for the Guatemalan National Games (McGehee, 1992). Recently, dog culls have reportedly taken place in preparation for the 2004 Olympic Games in Athens, Greece, the 2008 Olympic Games in Beijing, China, and the 2010 Commonwealth Games in New Delhi, India (Harrison, 2004; Jiang, 2008; Ray, 2010).

In the case of the WAP and the Rio Olympic Games, the deinstitutionalization or breaking down of the current, anthoparchic practices may have been disrupted such that new ways of doing things can be adopted. Within the context of sport organizations and their adoption of environmental sustainability initiatives, McCullough and Cunningham (2010) identified the importance of political, functional, and social pressures in the deinstitutionalization process (see also, Dacin, Goldstein, & Scott, 2002). These pressures aid in breaking down "commonly held traditions, beliefs, or values within an organization" (p. 349) and thus may prompt organizations to question their current practices and adopt more environmentally friendly ones. Similarly, Shrivastava and Guimaraes-Costa (2017) identified legitimacy pressures, or the questioning of current organizational systems, concepts, and practices, as necessary for organizations to engage in environmental sustainability efforts. In response to these legitimacy pressures, the authors suggest moving beyond simple, easy solutions like corporate social responsibility (CSR) and eco-efficiencies to a process of organizational metamorphosis whereby a "deeper engagement and melding" of industry, organizational, governmental, and other stakeholder interests are hybridized (Shrivastava & Guimaraes-Costa, 2017, p. 345). Thus, incorporating the interests or needs (i.e., capabilities and functionings) of the natural environment can easily be integrated into addressing the various pressures organizations face in response to planetary changes, as these interests are indeed stakeholder interests. There are very few examples of sport organizations that have responded to these pressures as such, but Minor League Baseball team, the Hillsboro Hops, is one notable exception.

When the Hops relocated to Hillsboro, Oregon, a town on the outskirts of Portland, they employed ecocentric management principles in all of their decisions (Toulon, 2015). Previously the Yakima Bears, located in Yakima, Washington, the team committed to environmental sustainability in their organization, its facilities, its practices, and within the surrounding communities. For example, when their stadium was constructed, 57 tons of construction debris was collected and recycled, and 77 tons of salvaged concrete and masonry were crushed and used as structural filler for the building

(Toulon, 2015). The turf at the stadium is artificial, thus illuminating the use of millions of gallons of water needed to maintain natural grass. The team conserves water by using low-flow water systems in all stadium bathrooms, kitchens, and locker rooms. Fans are encouraged to use reusable water bottles and stadium water fountains to reduce concession waste, they are shuttled via eco-friendly transportation to and from the nearest public transportation train station to reduce transportation emissions, and recycling receptacles are placed throughout the venue. All of these decisions were made in accordance with growing political, functional, and social pressures, as well as in accordance with the core values of the local community to establish legitimacy.

There is some suggestion that the ecocentric management practices of Hillsboro Hops can impact the organizational practices of other Minor League Baseball teams. Organizations within the same institutional environments tend to become isomorphic over, time thus suggesting that the adoption of ecocentric principles by one organization may lead to others adopting them as well (DiMaggio & Powell, 1983; Heugens & Lander, 2009). Normative isomorphism, for example, refers to the way in which organizations adopt institutionally preferred practices through the influence of industry and professional associations (DiMaggio & Powell, 1983). These entities work to change organizational and individual mindsets through conformity to a new way of doing things and legitimize this new way as the new norm. Thus, to the extent that industries, professional organizations, and national governing bodies promote ecocentrism and ecocentric management principles, they may become common practice. Mimetic isomorphism (i.e., voluntary imitation) may also play a role, as the uncertainty of the future of the natural environment may drive some organizations to adopt the practices of others. Thus, the successful adoption of ecocentric management principles by one organization may positively influence the institutional environment such that adopting these principles establishes legitimacy.

Once adopted, sport organizations can capitalize upon several new opportunities associated with adopting ecocentric management principles. Cunha et al. (2008) identify this "zone of opportunities" in relation to social and organizational forces that "converge as opportunities to a gradual emergence of an ecocentric mindset" (p. 318). Within this zone, organizations may generate organizational change, create corporate sustainability, and find new ecobusiness prospects. Iyer (1999) suggests that creating an ecocentric consumer culture can lead to a more socially and environmentally conscious consumer, thus creating a cyclical relationship in which consumers will expect organizations to operate in an ecologically just manner. Thus, the notion of business and the environment being opposing forces may be countered. Finally, while the primary concern of ecocentric organizations is the natural environment and stakeholder quality of life, there is some suggestion that organizational costs may diminish (Cunha et al., 2008).

The role of managerial leadership cannot be understated in the relation to incorporating ecocentric management principles within an organization (Lawler & Worley, 2011). Indeed, this is the case for any type of organizational change. Companies and organizations that have embraced ecocentric principles, like Patagonia, Unilever, Gap Inc., and the Hillsboro Hops, all have a guiding force through which the integration of ecocentic management practices has been successful, a leader. For Patagonia, this leader is Yvon Chouinard. Chouinard has a clear view of his organization's stance on numerous social issues including ecological justice and ecological health, and leads everyone else within the organization in accordance with this stance (Chouinard, 2006). Successful leadership in this regard focuses first on internal practices. As Lawler and Worley (2011) noted, organizations that proclaim their support for ecological justice and ecological health and develop marketing campaigns to communicate this to the public but fail to fully change how they operate may be viewed as hypocritical and thus, fail to foster trust with customers.

In sum, we propose several relationships, the testing of which offers fruitful avenues for future researchers. While it may not be feasible to test the entirety of the model in one single study, scholars can test portions of the model using a variety of approaches. For example, there are three distinct, yet related, dimensions of ST – the paradigm dimension, language dimension, and methodology dimension. While this work focused on the paradigmic dimension (i.e., forest thinking, dynamic thinking, operational thinking, and closed-loop thinking; see Maani & Cavana, 2007) and to some extent the language dimension, it would be advantageous to also employ the methodological dimension. As Maani and Cavana note, systems thinking and modeling (ST&M) methodology provides guidelines and phases through which interventions and organizational learning can occur. Thus, through problem structuring, causal loop modeling, dynamic modeling, scenario planning and modeling, and implementation and organizational learning, organizations can devise an intervention for the particular problem they are facing. In this work, the problem would be anthroparchic norms. Another approach, soft systems methodology (SSM) can also be employed. The basis for SSM is the belief that problem solving and decision-making cannot be separated from human and organizational factors (Maani & Cavana, 2007). Thus, through a series of stages, a more complete, rich picture of the complexity of the organization and the problems the organization is facing is developed. At the individual level, cognitive mapping, the likes of which is used to challenge mental models, can also be used.

4. Conclusion

Recognizing the shared responsibility all entities with a vested interest in keeping the Earth habitable, this work proposes ways in which sport organizations can take action by incorporating ecocentric management principles within their organizational practices. By drawing upon the tenets of the systems thinking paradigm and the four levels of thinking model, the underlying beliefs and values guiding current organizational practices within sport organizations were identified as anthroparchic. By adopting an equity-based perspective, recognizing the interdependent relationships between humans and the natural environment, and acknowledging the manner in which sport organizations hinder the capabilities and

functionings of the natural environment anthroparchy can be challenged through ecocentric management practices. In doing so, sport organizations can contribute to the health of the planet and all of its inhabitants and serve as ecologically just models for organizations in other industries to emulate.

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