A Unified Model of Non-Profit Sport Organizations Performance: Perspectives from the Literature

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Abstract

Little consensus has emerged about how organizational performance should be defined and measured. Most studies have used traditional approaches to give their own perspective about organizational performance and effectiveness, but none have recently tried to encompass these different views into one unified model. In the present paper, Chelladurai's systems view of organizations is used to integrate the dimensions of organizational performance highlighted by previous studies on non-profit sport organizations. These organizational performance dimensions are highlighted and categorized into macro-dimensions (e.g., financial resources acquisition, size, internal atmosphere, organizational operating, financial independence, achieving elite sport success and mass sport participation). Relationships between these macro-dimensions are analyzed. A multidimensional framework is developed which gives an overview of which dimensions constitute organizational performance in non-profit sport organizations and of how to measure them. Further research directions and management implications are discussed.

Keywords: literature review, non-profit sport organizations, organizational performance, systems view model, unified model, sport management, performance measurement

The construct of organizational performance assesses an organization's performance by evaluating the input (e.g., available resources), throughput (e.g., processing of the input) and output (e.g., goals achieved) of the organization. However, little consensus has emerged, either theoretically or empirically, to what constitutes organizational performance and how to measure it (Sowa, Selden & Sandfort, 2004). The increasing amount of literature and research on this topic is characterized by varying theoretical perspectives and research objectives, which make accumulation and integration very hard (Herman & Renz, 1999). Nonetheless, the option to move away from defining (and measuring) performance (effectiveness and efficiency) is not a viable one (Venkatraman & Ramanujam, 1986). Performance is of theoretical, empirical and practical significance. Even in non-profit organizations (NPOs), questions of performance have become increasingly important in the world of practice, as government and philanthropic funders, clients, and the public exert increased pressure on NPOs to demonstrate their impact on complex social problems (Sowa, Selden & Sandfort, 2004). The apportioned amount of subsidy is usually based on some predetermined criteria related to the characteristics, performance and effectiveness of organizations (Papadimitriou, 2007; Schulz, 2005). As a result, rational criteria and conditions for investments, subsidies and their priorities need to be established (Lim et al., 1994). Consequently, the application of organizational performance criteria to NPOs management becomes increasingly important.

To our knowledge, no recent study has fully attempted to synthesize the literature on the organizational performance measurement of non-profit sport organizations (NPSOs) into a unified model. Based on a review of the studies that specifically addressed the organizational performance (and effectiveness) of NPSOs at operational level, the present paper aims to provide a multidimensional framework in order to understand, analyze and measure organizational performance of NPSOs. This paper contributes to the literature on sport management by proposing key dimensions and measures of organizational performance of NPSOs. Furthermore, it combines these dimensions into a coherent framework which serves

as a starting point for future research and aims to provide conceptual consistency in the study of organizational performance in the sport management literature. This paper provides policy makers, government and managers of NPSOs a model to measure performance.

The paper is structured as follows. First, the concept of organizational performance at the operational level is defined. Secondly, a brief overview is provided of the classical method for measuring organizational performance and their limitations according to their application to NPSOs. This is followed by a presentation of relevant studies measuring organizational performance in NPSOs in highlighting their similarities and divergences. Thirdly, an explanation of how the unified model has been constructed through a literature review based on performance criteria (i.e., dimensions and measures) is presented in the method section. Fourthly, the model is described and the relationships between organizational performance dimensions are discussed in the findings section. Finally, suggestions for future research and managerial implications are provided.

Organizational Performance in Question

Organizational performance has been studied carefully in both for-profit and non-profit organizations. Nevertheless, the study of organizational performance is complex and there is still a "lack of conceptual consistency" (Balduck, 2009, p.22). Three reasons could explain this. First of all, organizational performance has been considered by different schools of thought (Walton & Dawson, 2001) from stakeholders' perspective through to goal or system resources models, each having their preferences and criteria for understanding and measurement, leading to various approaches. Secondly, it has been studied in many different types of organizations. Depending on the way success is defined by the organization, performance will have different meanings. Because organizational mission and goals are obviously different when it comes to different types of organizations, it requires different definitions. As a result, researchers can investigate and measure organizational performance in different ways. Thirdly, there is the issue of multiple constituencies (Connolly, Conlon &

Deutsch, 1980). That is, each stakeholder of an organization may have an individual view on how the organization's performance should be assessed, which might not be the same as the organization itself (Crozier & Friedberg, 1977). These three reasons obviously obstruct the possibility of a unified approach towards, and a unique definition of, organizational performance. As a consequence, we see diversity in the research on organizational performance according to different approaches, definitions and individuals' expectations. Therefore, the present paper argues in favor of a relevant and consistent definition and model of organizational performance which can be used to obtain a holistic picture of a NPSO's performance.

Defining and Measuring Organizational Performance

Usually, organizational performance is seen as a combination of effectiveness and efficiency within the organization (Madella, Bayle & Tome, 2005; Mouzas, 2006). Effectiveness refers to the relationship between the initial goals set by an organization and the extent to which they have achieved them in their results. Efficiency, however, is traditionally defined as the comparison between the available means of an organization and the results they achieve. Both efficiency and effectiveness are important in defining organizational performance. In line with Arrington, Gautam and McCabe (1995), Madella et al. (2005, p.209) stated that organizational performance has "a greater semantic extension than the notion of organisational effectiveness". They defined it as "the ability to acquire and process properly human, financial and physical resources to achieve the goals of the organisation." (Madella et al., 2005, p.209). This definition might not put enough emphasis on efficiency. However, the authors were able to shed light on three crucial points in which an organization has to perform to reach high organizational performance: (1) attract the necessary inputs and (2) use/transform them efficiently during throughput in order to (3) achieve relevant and targeted outputs. These three phases reflect three different main models that have been applied to measure organizational performance: (1) the Systems Resources Model (Yuchtman

& Seashore, 1967), (2) the Process Model (Pfeffer, 1977; Steers, 1977) and (3) the Goal Model (Price, 1968; Scott, 1977). Added to these main approaches, researchers (Bayle & Madella, 2002; Cameron, 1986; Shilbury & Moore, 2006) have also highlighted two others models dealing with constituents'/stakeholders' perceptions of organizational performance: the Multiple-Constituency Approach (Connolly et al., 1980) and the Competing Values Approach (Quinn & Rohrbaugh, 1983).

Limitations of these models were highlighted by Bayle and Madella (2002) for national sport organizations. NPSOs have intangible, inaccurate and/or vague goals which make their measurement challenging in the Goal Model, even more they (constantly) need to adapt these goals to their changing and competitive environment. The Systems Resources Model needs a clear connection between output and input, which is often lacking in non-profit organizations. The reason for this is the receipt of resources from public agencies which are annually renewable or other undefined resources which could lack transparency. The duality of volunteers and paid staff of NPSOs make the connection between organizational process and the primary goals difficult to measure properly if assessing organizational performance through the Process Model (Bayle & Madella, 2002). The Multiple-Constituency Approach is difficult to operationalize in non-profit organizations due to the amount of constituencies, each having their own perception of what the organization should be doing, and each requiring a minimum degree of satisfaction. The Competing Values Approach proposes a theoretical framework with three dimensions which match constituent preferences: internal-external, stability-flexibility and process-outcome. However, the organization may not have a clear view of its own priorities. This model is difficult to apply to NPOs or NPSOs and does not assess, in detail, the ability to achieve goals (Bayle & Madella, 2002).

Researchers (Herman and Renz, 1999, 2008; Shilbury and Moore, 2006) concluded that organizational performance should be considered as a multidimensional construct, thus measured by multiple criteria. We suggest in this paper the following multidimensional and

operational definition of organizational performance: *the acquisition of necessary resources and their efficient use through the organization processes to achieve relevant and targeted goals, as well as a high satisfaction of the organization stakeholders.*

The following section gives an overview of the literature on organizational performance of NPSOs and its evolution towards elaborated multidimensional models.

Insert Table 1 about here

Organizational Performance Approaches for Non-Profit Sport Organizations

Table 1 shows a clear overview of the present and relevant sport management literature on organizational performance we discuss hereafter. We have summarized the relevance, limitations and practical application of eleven studies measuring or assessing organizational performance.

One of the first studies on organizational performance in NPSOs was conducted by Frisby (1986). She examined the structure and effectiveness of 29 Canadian National Sport Governing Bodies by integrating the goal and system resources models. The degree of effectiveness under the goal model was measured by world ranking criteria. Effective resources acquisition under the system resources model was measured by operating budget of each organization and increase in funding they received from 'Sport Canada'. This study reveals that structural variables (i.e., job description formalization, personnel and new program decentralization, salaried program staff and committee specialization, clerical ratio, paid staff professionalism and turnover rate) are associated to improved goal achievement and financial resources acquisition. Frisby (1986) argued the need to analyze NPSOs from an organization theory perspective in order to improve the way these organizations are managed. However, her criteria to assess effectiveness were restricted to success in elite sport and attraction of funds. Other considerations (e.g., organization processes, community goals

achievement, stakeholders satisfaction) should be included when studying NPSO performance.

Chelladurai (1987) extended the research in this area by developing a theory of organizational performance in NPSOs using four traditional models. According to Chelladurai (1987), every organization receives inputs from its environment (Systems Resource Model), processes this input into desired outputs (Process Model) and produces this output in order to reach their goals (Goal Model). Furthermore, the organization is dependent upon its environment represented by the various interests of its constituencies (Multiple-Constituency Approach) whose expectations need to be satisfied. This general view on organizations led him to develop an open systems view of models of organizational performance. The model developed by Chelladurai (1987) synthesizes the different models into a multidimensional approach. His conceptualization is a shift in theory from the use of basic models to more elaborated and multidimensional models specific to NPSO performance measurement.

The theoretical model of Chelladurai (1987) has been used by Chelladurai, Szyszlo and Haggerty (1987) and Koski (1995) to measure organizational performance of NPSOs. These researchers were the first who analyzed global organizational performance of NPSOs measuring specific dimensions and their relations. Chelladurai et al. (1987) highlighted six dimensions of organizational performance for National Sport Organizations in Canada. They focused on the monetary and human resources (input) and the throughput and output of both elite and mass sport.

In line with this open system perspective, Koski (1995) examined the organizational performance of Finnish sports clubs according to five dimensions: (1) the ability of a sports club to obtain resources, (2) the internal atmosphere, (3) the efficiency of the throughput process, (4) the realization of aims (i.e., success and participation), and (5) the general level of activity. In this research, Koski (1995) tried to determine the relationships between all five dimensions. The findings showed that all dimensions were intercorrelated, except internal

atmosphere (i.e., quality of social interaction in organizations). It was found that the success of an organization is highly correlated with how widely the club is known. Additionally, there was a relationship between the success of a club and its ability to obtain income. Similarly, a correlation between the ability to obtain income and how widely the club is known was determined. Koski (1995) suggested that success may lead to better reputation and greater resource acquisition or that the ability to obtain income has to come first to start being successful and known. Finally, performance was found to be linked to the size of the membership, ideological orientation, and organizational environment. Although Koski's (1995) study showed very different dimensions and measurement of a sport club performance, the study focused essentially on efficient and economic perspectives. More attention should have been paid to interaction and the organizational atmosphere within the organization. The same critique could be addressed to Chelladurai et al. (1987) who focused on elite and mass sport and neglected social interaction. The model of Chelladurai (1987) was a good step forward in the concept of organizational performance of NPSOs and the identification of dimensions through constituents' perceptions, but it does not clearly provide specific dimensions and a range of measures to fully understand the specific nature of NPSOs.

Growing interest emerged in the sport management literature towards constituents'/stakeholders' perceptions of organizational performance, in line with the Multiple-Constituency Model. This model has been investigated by Papadimitriou and Taylor (2000) to analyze different constituents' perceptions of effectiveness in Hellenic national sports organizations (NSOs). Six constituent groups were surveyed – national coaches, elite athletes, international officials, scientific staff, paid administrative staff and board members – using a 33-item inventory of effectiveness. Factor analysis showed that five operational dimensions were perceived critical for effectiveness: calibre of the board and external liaisons, interest in athletes, internal procedures, long-term planning and sports science support. These dimensions are, however, limited to the organization process. The results also

showed that athletes, coaches and scientific staff were the least satisfied groups. These findings substantiate the general premise that organizational performance is a multidimensional construct and encourage the application of a multiple constituency approach to organizational performance assessment. Papadimitriou and Taylor (2000) study support a multi-perceptual approach leading to deepening knowledge in organizational performance assessment.

Wolfe, Hoeber and Babiak (2002) also investigated organizational performance through constituents' perceptions. They conducted a case study (within the context of Intercollegiate Athletics) based on perception of individuals (n=10) across different stakeholder groups to discover the relationships among the attributes that contribute to perceptions of organizational performance. Contrasting with Papadimitriou and Taylor (2000), Wolfe et al. (2002) did not limit their study to organization processes. Their results showed that six factors are essential determinants of perceptions of athletic program success: (1) athletic performance on the field, (2) student-athlete education, (3) program ethics, (4) effects of programs on a university's image, (5) resources management and (6) institutional enthusiasm. Furthermore, the data from the interviews showed that, while determinants of perceptions of success often work in concert with one another (performance on the field, effects of programs on a university's image, resources management, institutional enthusiasm), some determinants tend to influence perceptions of success on their own (program ethics and student-athlete education). The link between institutional education and athletics programs influence the dimensions highlighted by stakeholders in the study of Wolfe et al. (2002). The programs delivered by colleges and universities in the United States have both objectives of academic and athletics excellence. Therefore, some dimensions (e.g., education, institutional enthusiasm, university's image) might not be directly applicable to most NPSOs (e.g., European National sport organizations, local sport clubs) which rely on a different sports model.

Papadimitriou (2002) attempted to examine and broaden Frisby's (1986) conceptual framework. In this research, Greek local sport clubs were analyzed based on measurements of contextual (e.g., organizational size, age and resource dependence) and structural (e.g., formalization, specialization, centralization) variables. The relationship between performance and these variables was examined. The results supported a trend towards a loosely structured, less bureaucratic organizational operation for the local sport clubs, which is accompanied by external resource dependence and moderate performance. This study used the number of athletic programs and sports offered by a club to measure a sport club performance. These indicators are not relevant in countries where national sport organizations and sport clubs are responsible for one sport only.

The study of Bayle and Madella (2002) was the first to combine mixed data to measure annual organizational performance of NPSOs. They constructed a multidimensional organizational performance model measured by both quantitative (e.g., financial data, organizations' reporting) and qualitative data (e.g., experts' and stakeholders' perceptions and judgment) from different sources (e.g., government, sport federations, media). Their model consists of 6 dimensions: (1) institutional (membership and elite sport results), (2) social internal, (3) social external, (4) economic and financial, (5) promotional, (6) organizational. The performance of national sport governing bodies from France across these 6 dimensions was measured and compared with one another. Also, they developed their new performance measurement technique in a taxonomic perspective. As a result, six performance profiles of sport governing bodies were identified through clustering, named the mighty, the effective, the dilemma, the atypical, the defective and the problematic. This taxonomy allows the analysis of the global organizational performance of sport federations. It reveals interaction between dimensions and actions to be viewed from a general perspective. Although combining quantitative and qualitative data to develop a multidimensional model is laudable, measurement of some dimensions might be arguable (e.g., constituents' perceptions of the

social and economic contribution of their NPSO to society to measure social external performance).

Madella, Bayle and Tome (2005) have also developed a multidimensional model of organizational performance. They were the first who measured it in different countries. They studied national swimming organizations in four Mediterranean countries. To allow comparison between organizations, they used classic weighting variables (e.g., GDP, sport participation, total population), and discussed the different sport system across countries. However, they did not use other external, political or cultural variables in their measurement. They argued that sport federations' features and the contingent nature of performance (i.e., changing goals, environment and life cycle) need to be considered when comparing the performance of the same individual organization over years, rather than benchmarking similar organizations, as was the case in their study. Five dimensions were constructed: (1) human resources, (2) finance, (3) institutional communication, partnership and inter-organizational relation, (4) volume of services delivered and (5) international competitive results of athletes. All national swimming organizations were classified based on their score on each dimension. A global evaluation of performance was calculated. Madella et al. (2005) were able to identify key success factors of performance through interviews of key individuals of governing bodies (e.g., capacity to generate funds, involvement of former athletes, access to services, financial assistance and high level expertise for athletes). Nevertheless, they did not pay close attention to stakeholders' perceptions.

The Competing Values Approach (CVA) has first been applied to non-profit national Olympic sporting organizations in Australia by Shilbury and Moore (2006). In their study, constituents of 10 of these organizations were surveyed. Shilbury and Moore applied a factor analysis on each of the four quadrants of the CVA, revealing a one-factor structure for six out of eight cells defined in the original CVA approach. These were flexibility, resources, planning, productivity, availability of information and stability. The other two cells, skilled

workforce and cohesive workforce, had a two-factor structure. Furthermore, they performed a confirmatory factor analysis, which showed that the rational-goal model, including productivity and planning, was the critical determinant for the effectiveness of national Olympic sporting organizations. Their results also indicated that financial resources acquisition was not perceived by constituent groups as a critical determinant of effectiveness despite other studies (Frisby, 1986; Koski, 1995) asserting that resources underpin effectiveness. The authors assumed the latter underestimates its importance in organizational effectiveness as the proportion of government's funds tends to decline. They recommended further research to investigate what constitutes productivity.

More recently, Balduck (2009) also studied the organizational effectiveness of NPSOs (i.e., sport clubs in Flanders, Belgium) using the CVA approach. More specifically, she put forward two levels of analysis: management effectiveness and program effectiveness. These two levels were originally introduced by Sowa, Selden and Sandfort (2004) and were found to be particularly relevant for NPSOs. As a result, the criteria that she extracted from an extensive literature review were generated from two levels of analysis, management and program, within the four domains of the CVA. The management level refers to the characteristics that deal with organizational issues and management actions of the administrators and assistants (such as coaches) within the organization. The program level refers to the characteristics that deal with the services or programs provided by the organization. Balduck surveyed (2009) only two constituent groups (i.e., board members and sport members) of sport clubs, but others (e.g., staff, referees, trainers, sponsors, representing authority at community level, spectators) could have been included.

Considering strategic objectives and operational goals in multiple dimensions, Winand, Zintz, Bayle and Robinson (2010) proposed a quantitative model to measure the organizational performance of sport governing bodies in Belgium. Furthermore, the authors assessed, through internal stakeholders' perceptions, the priority of each dimension and each

strategic objective for 13 Olympic sport governing bodies. Their results showed that five dimensions were critical for organizational performance: sport, customer, communication and image, finance and organization. They also identified tension between elite and sport for all objectives in term of resources allocation. The authors assumed that the performance of sport governing bodies could have an effect on the redefinition of the priority of their strategic objectives and operational goals. They called for mixed method design combining quantitative and qualitative data in analyzing organizational performance and the development of performance measurement tools. The authors assumed Olympic sport governing bodies have elite sport aims, but found that some were only mass sport oriented or did not consider elite sport as a priority.

The studies mentioned above are relevant articles defining or measuring organizational performance for NPSOs. They show the development of organizational performance research in NPSOs from basic models to more sophisticated multidimensional models, to greater attention to constituents' perceptions and expectations and more fine-grained and mixed data. The aforementioned articles contribute to the knowledge and understanding of organizational performance research in NPSOs. The combination of their findings could lead to a general multidimensional framework of organizational performance in NPSOs, acknowledging that particular research methods were used in various contexts for different organizations and time periods.

Method

The added value of this paper is to combine the different research perspectives on the organizational performance of NPSOs in order to construct one framework (i.e., unified model). First we extracted all the dimensions and measurements suggested by relevant articles exploring organizational performance in NPSOs. Next, we related these dimensions to one of the main categories of the systems view model developed by Chelladurai (1987): (1) input, (2) throughput, (3) output and (4) stakeholders' perceptions, in line with the basic models (i.e.,

(1) system resources model, (2) process model, (3) goal model, (4) multiple constituency approach, associated with competing values approach).Then, we contrasted and matched authors' dimensions with one another according to their definition and/or measurement. As a result, similar dimensions merge into one macro-dimension. The dimensions highlighted through stakeholders' perception of effectiveness and performance were treated differently. They shed light on elements of organizational performance that stakeholders find relevant. We also identified the stakeholders surveyed. The result of this methodological process is a synthesis of the findings of studies on organizational performance in NPSOs.

Eleven articles were considered relevant in the research of organizational performance measurement in NPSOs. Seven articles measured NPSOs performance and four assessed NPSO stakeholders' perceptions of organizational performance. Forty-eight dimensions of organizational performance were highlighted in research measuring organizational performance. We reduced them to twenty macro-dimensions. Perceptions of twenty-one stakeholders on NPSOs performance were assessed in different studies using stakeholder theory. We reduced them to nine main stakeholders given that the same entities appear more than once. Dimensions of organizational performance emerge that have not been measured in literature, but that stakeholders deem critical.

In the next step, we extracted the significant correlation coefficients found between the authors' organizational performance dimensions in five different articles (Bayle & Madella, 2002; Chelladurai et al., 1987; Koski, 1995; Papadimitriou, 2002; Winand et al., 2010). One hundred and thirty-six coefficients were highlighted. Appendix 1 shows in an open manner each correlation coefficient for each author according to their own dimensions. As macro-dimensions are the result of a categorization of equivalent dimensions between different authors, these correlations indicate how macro-dimensions relate with one another. However, caution needs to be taken given that the authors reviewed in this paper have used different

research designs. Therefore each time a relationship between macro-dimensions is discussed, the author(s) who generated the results are given.

Findings

Twenty macro-dimensions of NPSOs performance are highlighted and divided into four categories: (1) input, (2) throughput, (3) output and (4) feedback. Each category is described and the relationships between their macro-dimensions are discussed. Tables 2 to 5 present the definition and measurement of each dimension in order to validate the categorization of dimensions into macro-dimensions and to help the reader to understand their content. Stakeholders' perceptions of organizational performance is the fifth highlighted category concerned with research in the sport organization literature using multiple-constituency and competing values approaches (Table 6). It shows which dimensions stakeholders find relevant.

Insert Table 2 about here

Input

As five articles demonstrated convergence in measuring input, we reduced the twelve dimensions they highlighted into 4 macro-dimensions (Table 2). They are numbered from 1 to 4 below. Input is mainly studied with regard to financial and human resources. Number of (1) members, (2) volunteers and (3) technical staff are considered as resources. They give information about the size of organizations. Number of members is used by four studies (Chelladurai et al., 1987; Koski, 1995; Madella et al., 2005; Papadimitriou, 2002) to measure organization size. Financial resources acquisition (4) refers to the ability of NPSOs to obtain large and various financial resources. Frisby (1986), Chelladurai et al. (1987), Koski (1995) and Papadimitriou (2002) showed that financial resources are mainly acquired through government support (i.e., subsidies, public resources, grants), sponsorship and private donations (e.g., membership fees).

The macro-dimensions regarding size (volunteers, membership and technical staff) are intercorrelated, according to Papadimitriou (2002). It is not surprising that, although there might be scale effects, more members require more volunteers and technical staffs. At the same time, financial resources acquisition is correlated positively with all three dimensions referring to size (Chelladurai et al., 1987; Koski, 1995; Papadimitriou, 2002).

Insert Table 3 about here

Throughput

As we learnt from the literature, similarities exist between five articles measuring throughput through fourteen dimensions. We have reduced these dimensions into 8 macro-dimensions numbered from 1 to 8 below (Table 3). These refer to processes used by NPSOs in order to achieve their goals and to operate efficiently. Internal atmosphere (1) is assessed through the relationships between internal stakeholders (Bayle & Madella, 2002; Koski, 1995) whereas (2) organizational operating is understood as the quality and stability of functioning in reference to education, experience, reactivity and turnover (Bayle & Madella, 2002; Winand et al., 2010). Internal atmosphere is strongly correlated to organizational operating, showing a link between social atmosphere and the implication of internal stakeholders and the quality and stability of functioning (Bayle & Madella, 2002). Internal atmosphere is also correlated to (3) process efficiency which refers to the breadth of operations divided by income and number of staff (Koski, 1995). Internal atmosphere is negatively correlated to (4) external communication and contacts (Koski, 1995). However, external communication and contacts is correlated to (5) financial independence and both of them are negatively correlated to (6) financial resources management (Winand et al., 2010). Investment in communication and partnerships might help reach financial independence, but seems to conflict with allocation of resources for members' activities. Financial independence refers to independence from public funding and thus the distribution of funding streams and the organization's capacity of self-financing over time, which includes the concept of financial

sustainability. Chelladurai et al. (1987) highlighted (7) elite and (8) mass sport programs in reference to throughput. They considered and measured these as processes whereas other researchers (Koski, 1995; Papadimitriou, 2002; Winand et al., 2010) considered the quantity and quality of services offered to members and elite and defined them as output.

Insert Table 4 about here

Output

Seven articles showed nineteen dimensions measuring output, which we reduced to 6 macro-dimensions, numbered from 1 to 6 below, due to their similar measurement (Table 4). They refer to (1) the achievement of elite sport success, (2) mass sport participation and (3) services the NPSOs could provide to society, (4) membership, (5) elite athletes and (6) multipurpose services. The achievement of sport results, measured by international sport success or high world ranking seems to be correlated to the achievement of mass sport participation goals in reference to the evolution of members or share of active participants (Bayle & Madella, 2002). Both of them are correlated to services to society, measured by the social legitimacy of the NPSOs' activities in society, and services delivered measured by general services provided (Bayle & Madella, 2002). Services to members is correlated to the achievement of elite success and volume of services delivered (Koski, 1995), but is not consistently correlated to the achievement of mass sport participation. Services to elite athletes and to members are correlated (Papadimitriou, 2002). The former seems to be linked to achieving elite success, according to Winand et al. (2010).

Insert Table 5 about here

Feedback

Three dimensions were found in two articles measuring feedback. We have reduced them to 2 macro-dimensions regarding external and internal feedback (Table 5). Bayle and Madella (2002) and Koski (1995) found that image (i.e., external feedback) refers to the notoriety and representation people have of the NPSOs. Estimation refers to internal feedback

regarding the satisfaction of key internal stakeholders (Koski, 1995). A correlation between these two macro-dimensions has been found by Koski (1995), who measured satisfaction through manager's estimation, however, a more thoughtful assessment including external and internal stakeholders should be considered.

Insert Table 6 about here

Stakeholders' perceptions

Perceptions of nine main internal and external stakeholders have been assessed in the literature (Balduck, 2009; Papadimitriou & Taylor, 2002; Shilbury & Moore, 2005; Wolfe et al., 2002): (1) board members, (2) affiliate members, (3) coaches, (4) officials, (5) administrative paid staff, (6) scientific and technical paid staff, (7) elite athletes, (8) sponsors and (9) government agencies. The dimensions these stakeholders deemed important when considering organizational performance are highlighted and subdivided into input, throughput, output and feedback in table 6. Stakeholders' perceptions of input refer to financial and human resources, as mentioned previously, but also to physical resources (i.e., sport accommodation and sport material). The physical resources issue has not been considered by researchers outside the stakeholders' perception approach. Stakeholders' perceptions of throughput refer to the processes within the organization, including communication, share of information, internal procedures, planning, elite athletes' assistance, scientific support, support and recognition of the staff. It also refers to the characteristics of the latter: education, skills, relationships, calibre of the board and their external contacts, and characteristics of the whole organization (stability, atmosphere). Several of these dimensions highlighted by researchers through stakeholders' perceptions were not taken into account when measuring organization performance: scientific support, stability (system of retention of internal stakeholders and consistency management), recognition, staff support and planning. Stakeholders' perceptions of output refer to a large diversity of goals which represent the

organization's success: financial goal, social goal, societal goal, competition goal, recreation goal, education of athletes, safety of sport material and sport activities. Stakeholders' perceptions of feedback refer to satisfaction, enthusiasm, organization's reputation and image (external profile) and ethical values projected by activities and players.

Insert Figure 1 about here

Unified model of non-profit sport organizations performance

This review of the sport management literature on non-profit sport organization performance results in the unified model presented in Figure 1. This model shows each macro-dimension distributed into one of the key categories of the systems view model of Chelladurai (1987), as well as the main stakeholders of NPSOs and the dimensions they consider critical (underlined in Figure 1). In order for the figure to be read, it only shows the strong (i.e., correlations superior to .4 between authors' dimensions) relationships between macro-dimensions, following the sequence input-throughput-output. All significant correlations between the authors' dimensions are presented in appendix 1 and discussed below.

The model represents the human and financial resources required (input) to develop efficient and effective processes (throughput), according to how an organization is functioning, to achieve its sport and services goals (output). These observable results have an effect on its image and reputation and on the satisfaction of its internal and external stakeholders (feedback) whom expectations match the perception of how the organization should be managed, what elements are critical for stakeholders and which goals should be reached. The following section discusses the model and the relationships between the different macro-dimensions within the systems view.

(Cor)relations between (macro-)dimensions of organizational performance

A clear connection exists between the acquisition of financial resources and size (Chelladurai et al., 1987; Koski, 1995; Papadimitriou, 2002). Larger membership based

organizations can receive more membership fees. Sponsors and funders might also be more willing to support them. An increased amount of members may require the organization to have an increased number of technical staff (i.e., for coaching and training), and could also require the organization to have more volunteers to support their activities. Membership size and financial resources acquisition have positive relationships with mass sport programs (Chelladurai et al., 1987) and external communication and contacts (Koski, 1995), and negative relationships with process efficiency and internal atmosphere (Koski, 1995). On the one hand, more human and financial resources could help to develop activities in mass sport participation and investment in the development of communication and partnerships. On the other hand, it could be more difficult to keep peaceful relationships between staff when the latter are increasing or when more financial resources are in balance.

Size and financial resources acquisition are correlated with elite and mass sport goals, as well as services delivered by NPSOs. Positive correlations were identified between financial resources acquisition, elite sport programs (Chelladurai et al., 1987) and elite sport success (Chelladurai et al., 1987; Koski, 1995). Also, membership size is correlated with the achievement of elite sport results (Bayle & Madella, 2002; Koski, 1995). Large human and financial resources seem to be linked with elite sport success. Explanations could be a bigger talent pool and higher financial resources or by the fact that successful organizations should be able to attract more members. However, Chelladurai et al. (1987) found no correlation between membership size and elite sport achievement.

Financial resources acquisition and membership size have also been found to be correlated with mass sport participation (Chelladurai et al., 1987). Nevertheless, Koski (1995) found a negative correlation between membership size and mass sport achievement -measured by the share of active participant- but a positive correlation between size and services to members and general services delivered, in line with Papadimitriou (2002). Thus, more

members might not always mean more active members but might be linked to an increased number of programs, activities or advantages.

Elite sport programs seem to be correlated to both achievement of elite sport success and – to a lesser degree – to mass sport participation (Chelladurai et al., 1987) whereas mass sport programs seems to be correlated only to mass sport participation (Chelladurai et al., 1987). External communication and contacts is positively correlated to 'elite success', to 'services to members' and to 'services delivered'. However, it is also negatively correlated to mass sport participation achievement (Koski, 1995). Internal atmosphere is positively correlated to mass sport participation achievement (Koski, 1995) and organizational operating (quality of functioning and reactivity) (Bayle & Madella, 2002). Bayle and Madella (2002) also found connections between organizational operating, mass sport participation (evolution of membership) and service to society, all macro-dimensions inter-correlated. Winand et al. (2010) found a correlation between financial resources management and services to members. They suggested that better allocation of financial resources for members might increase the number of services.

Image is correlated with several dimensions. First of all, it is positively correlated to the elite success (Koski, 1995). This might be due to the fact that elite success generates good reputation for NPSOs, which might also allow them to attract members and athletes. Even if no consistent correlation has been found to link image and mass sport participation achievement, image has been found to be positively related to the general services delivered and services to members (Koski, 1995). Image is also related to external communication and contacts, financial resources acquisition and financial independence (Bayle & Madella, 2002; Koski, 1995). Although we cannot presume any causal relations, having a good reputation can allow an organization to develop diverse external contacts to acquire more various resources, in line with the arguments of Koski (1995) who also argued that the ability to acquire resources could come first for success and reputation to follow.

Satisfaction is correlated to human and financial resources (i.e., financial resources acquisition, membership size), as well as goals achievement (i.e., elite and mass sport achievement, services delivered and services to members) (Koski, 1995). Acquiring sufficient resources and achieving expected goals seem to be crucial for internal stakeholders' satisfaction. External communication and contacts is also correlated to satisfaction (Koski, 1995).

Some dimensions highlighted in the studies based on stakeholders' perceptions of performance of NPSOs have not been paid particular attention to in studies measuring their organizational performance. Physical resources (sport accommodation, sport material), stability and consist management, sports science support, staff support and recognition, are example of dimensions found to be critical by stakeholders, but not fully investigated in research. As well, societal feedback should be considered more carefully, including impact for sport members and spectators (external profile) and also through the ethical values projected. According to researchers (Balduck, 2009; Papadimitriou & Taylor, 2000; Shilbury & Moore, 2005; Wolfe et al., 2002) who investigated constituents' perceptions, the aforementioned dimensions play a role in perceptions of effectiveness and therefore performance. These elements could be further studied and might lead to (a) hypothes(e)s to be tested.

Discussion & Conclusions

It is important for future research on NPSO performance to have a common ground on which researchers can further build. Baruch and Ramalho (2006, p.39) stated that "in choosing criteria for future studies, we [Baruch and Ramalho] recommend adopting a common ground, backed up by specific criteria when a sector is unique, to reflect convergence and divergence in OEP [organizational effectiveness and performance] research". Through a review of relevant literature about organizational performance measurement and assessment of NPSOs, we have developed a unified model of non-profit sport organizations performance which combines the main findings of research in this area.

The model presented in this paper helps to establish a common ground. It highlights critical macro-dimensions and measurements specific to the NPSO context and distributes them among the different elements of the systems view model of Chelladurai (1987): input, throughput, output, perceptions of stakeholders and feedback.

Improving the way the organization is operating, including its quality, reactivity, qualification and staff experience might have a positive influence on the organization climate, the relationships between staff members, evolution of members and its reputation. Investment of NPSOs in external communication and contacts, limited by its financial and human resources, might be of value to increase image and number of services delivered by an NPSO to its members. Furthermore, elite successes seem to strengthen image and partnerships of an NPSO.

The unified model presented in Figure 1 includes key areas highlighted through stakeholders' perceptions (underlined in figure 1). Some of these areas (underlined and marked with an asterisk [*] in figure 1) have not been measured which allows for future development. Despite their interest in studies on stakeholders' perceptions, as well as on non-profit sport governance (Ferkins, Shilbury & McDonald, 2009) and management (Cuskelly, Taylor, Hoye & Darcy, 2006), human resources management has received little attention in studies measuring organizational performance of NPSOs. Researchers (as well as managers and policy-makers) should consider the assessment of (1) calibre, (2) training support, (3) recognition and (4) retention of volunteer board members and professionals for inclusion in an organizational performance model.

The use of physical resources (i.e., sports accommodation and materials) highlighted by Balduck (2009) is underestimated in organizational performance research. Physical resources are important organization inputs to take into account, especially for non-profit sport clubs or federations possessing their own facilities and sport equipment. Furthermore,

Balduck (2009) pointed out that safety of sport materials is being considered by stakeholders as critical for performance.

Planning has also been highlighted by Papadimitriou and Taylor (2002) and Shilbury and Moore (2006) as critical for NPSO performance. The development of a strategic plan has, however, not fully been taken into account in organizational performance research, as well as flexibility of processes, in the sense of how NPSOs monitor change (Shilbury and Moore, 2006). We assume both planning and flexibility should be included in the throughput of an effective NPSO.

Studies of stakeholders' perceptions (Balduck, 2009; Wolfe et al., 2002) emphasize three goals not yet tested in NPSOs performance measurement, namely (1) recreational, (2) financial and (3) ethical goals. Further research should consider including these in organizational performance measurement. Recreational goal refers to the amusement, pleasure, fun and enthusiasm (Balduck, 2009; Wolfe et al., 2002) generated by the sport activities of a NPSO. It might be crucial for leisure sport clubs, which are by definition not competition oriented, but also for other local sport clubs. Financial goal refers to the healthy financial results targeted (Balduck, 2009). Ethical goal refers to the ethical values projected by activities and players, including social, societal and education goals. It might be critical (crucial) for particular sports where violence and doping scandals are commonplace.

We highlighted nine main stakeholders surveyed by studies on stakeholders' perceptions of organizational performance (Balduck, 2009; Papadimitriou & Taylor, 2002; Shilbury & Moore, 2005; Wolfe et al., 2002). However, none has investigated the perceptions of sports apex bodies (e.g., international sport federations; Olympic committees) of the organizational performance of NPSOs. Interorganizational (sport) networks might be critical for NPSOs, as argued by Newell and Swan (1995) and could be examined further in organizational performance research.

Future challenges of NPSOs might be to better understand and explain high performance. The macro-dimensions presented here, added to external and environmental factors, are critical to shed light on how a NPSO can reach its multiple goals. The studies of Bayle and Robinson (2007), Winand, Rihoux, Qualizza and Zintz (2011) and Winand, Rihoux, Robinson and Zintz (forthcoming 2013) are examples of research on organizational performance in NPSOs, focused on highlighting performance predictors and determinants for high multidimensional performance. Further research should therefore consider the combination of factors necessary when understanding strategic organizational performance. Moreover, the time sequence of these elements in combination could be analyzed in detail to highlight pathways to success.

This paper provides a framework (i.e., unified model) to analyze organizational performance in NPSOs based on relevant literature. In highlighting macro-dimensions in order to understand and assess organizational performance, the framework makes clear what constitutes organizational performance in the NPSO context. The framework has managerial implications and added value for sport management. It takes, as much as possible, all relevant aspects of organizational performance into account and distributes them into an understandable map showing their multiple connections. Furthermore, it shows the critical elements of performance for stakeholders, which might help to communicate with them while reporting information, for example. Surprisingly, financial processes (financial resources management and financial independence which includes financial sustainability) and mass sport (mass sport programs, services to members and achievement of mass sport participation) were not particularly stressed in studies adopting a stakeholder approach for defining NPSO performance.

The paper also provides the measurements used by researchers to assess organizational performance dimensions. These measures (i.e., performance indicators) could form the base of a performance measurement tool applied to NPSOs while considering their specific context

and priorities (i.e., decide to weight the macro-dimensions). The aim would be to increase the organizations' output by using efficient and effective input and throughput while taking into account stakeholders' expectations and feedback. Thus, managers might pilot their NPSO to reach high performance. They would be able to monitor the organization input and throughput to achieve high stakeholders' satisfaction and improved output. The model suggested in this paper supports the strategy of NPSOs and should be adapted according to contextual changes. External factors, competitive and changing environment impact on organizational performance and need to be consider especially when comparing the same individual NPSO over time. At the same time, policy makers and government could use the framework for benchmarking purposes, in order to objectively assess and monitor NPSOs they fund and support.

The main limitation of this study results in the relationships between macro-dimensions based on the correlations of the authors' dimensions. Indeed, each dimension is measured differently by each author and therefore, each author has his/her own understanding of what their dimensions refer to. The second limitation refers to the different NPSOs analyzed by researchers to measure organizational performance in different contexts and time periods. These are sport clubs or national sport organizations from different countries, size, and sports. The aim of this literature review is to propose a general model for NPSOs. However, when considering specific organizations, the environment in which they operate is to be taken into account to adapt the model. Despite limitations, this paper has contributed to the body of knowledge by providing a multidimensional framework to understand, analyze and measure organizational performance of NPSOs. It should also be seen as an integration of relevant non-profit sport management literature on organizational performance towards a unified approach in the NPSO context and, hence, it should be a starting point for future research.

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Appendix 1: Correlation coefficients between the dimensions of the authors from the sport management literature about organizational performance

Five different articles (Bayle & Madella, 2002; Chelladurai et al., 1987; Koski, 1995; Papadimitriou, 2002; Winand et al., 2010) were selected which provide 136 significant correlation coefficients between dimensions of organizational performance. We present these correlation coefficients in the following tables (A1 – A5) for each author. The coefficients were used to estimate the relationships between two macro-dimensions.

A1 : Chelladurai et al. (1987): dimensions & correlations	D1	D2	D3	D4
Input-human resources (D1)				
Input-monetary resources (D2)	.16*			
Throughput-mass (D3)	.36**	.34**		
Throughput-elite (D4)		.40**	.14*	
Output-mass (D5)	.42**	.26**	.62**	.15**
Output-elite (D6)		.35**		.64**

* Significance at 0.05 level, ** Significance at 0.01 level

A2 : Koski (1995): dimensions & correlations	NM	OI	IA	BOI// BOS	AOS// MC1	PO%// MC2	BO	NA	WK	NCO
Number of members (NM)										
Ability to obtain income (OI)	.03									
Internal atmosphere (IA)	-.27	-.14								
Efficiency of the throughput process (BOI/BOS)	-.66/ -.34	-.62/ -.10	.29/ .19	.44						
Achievement-oriented (AOS/MC1)	.31/ .44	.37/ .34	-.11/ -.10	-.47/ -.51 // -.11/ -.18						
Participation –oriented (PO%/MC2)	-.11/ -.26	.16/ .11	.19/ .25	-.02/.16// .34/ .22						
General level of activity: operation (BO)	.53	.21	-.14	-.20//.09	.35// .32	.19// .02				
General level of activity: services (NA)	.39	.15	-.07	-.28// -.19	.26// .33	-.10// .05	.44			
General level of activity: image (WK)	.36	.30	-.20	-.47// -.17	.60// .49	-.04// -.04	.29	.34		
General level of activity: partnership (NCO)	.48	.05	-.20	-.30// -.24	.23// .20	-.01// -.13	.47	.41	.23	
Estimation of the general level of activity (EDM)	.51	.14	-.10	-.38// -.08	.32// .36	.37// .14	.49	.28	.22	.26

Note: No precise significance mentioned in Koski's paper. Some dimensions are measured according to two different measures

A3: Papadimitriou (2002): dimensions & correlations	D1	D2	D3	D4	D5	D6	D7
Total resources (D1)							
Public resources (D2)	.92**						
Number of volunteers (D3)	.53**	.67**					
Size: athletes (D4)	.86**	.80**	.71**				
Number of technical staff (D5)	.60**	.72**	.91**	.75**			
Number of scientific staff (D6)	.50**	.58**	.31*	.45**	.43**		
Sport programs (D7)	.55**	.63**	.90**	.73**	.82**		
Number of sports (D8)			.57**	.39*	.63**	.36*	.62**

* Significance at 0.05 level, ** Significance at 0.01 level

A4 : Bayle and Madella (2002): dimensions & correlations	D1	D2	D3	D4	D5	D6
Organizational performance (D1)						
Social internal performance (D2)	.58**					
Promotional performance (D3)	.37*					
Elite sport results (D4)						
Membership (D5)	.48**		.33*	.53**		
Economic and financial performance (D6)			.58**		.32*	
Social external performance (D7)	.41**			.48**	.63**	.38*

* Significance at 0.05 level, ** Significance at 0.01 level

A5: Winand et al. (2010): dimensions & correlations	D1	D2	D3	D4
Sport for all (D1)				
Communication and image (D2)				
Financial resources management (D3)	.43*	-.60**		
Financial survival (D4)		.54**	-.73**	
Organization (D5)				

* Significance at 0.05 level,** Significance at 0.01 level

Note: Correlations of two other dimensions were analyzed by authors we separated into four dimensions in order to include them in our framework.

Table 1: Overview of relevant models of organizational performance (and effectiveness) for non-profit sport organizations

Authors	Year	Model	Target organization	Findings	Advantages	Limitations
Frisby	1986	Goal Model, Systems Resource Model	National sport governing bodies	Patterns of structure and effectiveness in profit-oriented industries are also present in non-profits like National sport governing bodies.	Provides a link between organizational structure and effectiveness.	Effectiveness (performance) was merely described as achievement of elite successes and as the amount of operating budget they could acquire.
Chelladurai, Szyszlo, & Haggerty	1987	Goals, process and systems resource Models	National sport governing bodies	Critical dimensions for organizational performance: monetary and human resources (input) and the throughput and output of both elite and mass sport.	Provides a comprehensive framework of organizational performance from a viewpoint of organizations as open systems.	The relationships between input, throughput, output and environment variables were neglected.
Koski	1995	Systems resource model	Voluntary amateur sports organizations	Five dimensions of organizational performance: Ability to obtain resources, internal atmosphere, efficiency of the throughput process, realization of aims and general level of activity.	The relationships between input, throughput, output and environment variables were examined.	Only a limited number of variables in each category were used.
Papadimitriou & Taylor	2000	Multiple-constituency approach	National sports organizations	Five dimensions were perceived critical in perceiving organizational performance: calibre of the board, long term planning, sports science support, interest in athletes& internal procedures	Determines the differences between constituent groups in sport organizations.	This study was based exclusively on qualitative data, while goal achievement and financial information is neglected.
Papadimitriou	2002	Goals Model / Systems Resource Model	Voluntary sport organizations (local sport clubs)	The structure of voluntary sport organizations trends towards a loosely structured, less bureaucratic organizational operation, accompanied with external resource dependency and moderate performance.	Provides a link between organizational structure and effectiveness.	'Organizational performance' was only assessed by two indicative measures: number of athletic programs and number of sports for which services are offered by the club.
Bayle & Madella	2002	Multi-dimensional (global performance)	National sports organizations	Six dimensions were perceived critical for organizational performance: Institutional, social external, organizational, promotional, financial and internal social performance.	Organizational performance assessment was based on multiple dimensions, associating both qualitative and quantitative criteria in a taxonomic perspective.	Organizations were categorized in different groups based on their scores on the various dimensions. Nevertheless, the difference in goals and priorities between these organizations was not taken into account.

Table 1 (*Continued)*

Authors	Year	Model	Target organization	Findings	Advantages	Limitations
Wolfe, Hoeber & Babiak	2002	Multiple-constituency approach	Intercollegiate athletics	6 factors most important for determining perception of athletic program success: athletic performance, student-athlete education, program ethics, effect program on university's image, resources and institutional enthusiasm.	Examined the relationship among attributes that contribute to perceptions of organizational performance.	Only qualitative data was used and findings may not be valid externally.
Madella, Bayle & Tome	2005	Multi-dimensional (global performance)	National swimming federations	Five dimensions are critical for organizational performance: (1) human resources, (2) finance, (3) institutional communication, partnership, inter-organizational relations, (4) volume and quality of services and (5) athletes' international performance.	Performance assessment was multidimensional, using a systemic approach.	No relationships between the dimensions were further examined.
Shilbury & Moore	2006	Competing Values Approach	Nonprofit national Olympic sporting organizations	Psychometric properties of the CVA were determined.	Application and validation of the CVA-approach to sport organizations.	Difficult to operationalize. Does not assess in detail the elements of the organizational performance.
Balduck	2009	Competing Values Approach	Nonprofit sports organizations (sport clubs)	CVA-approach for non-profit sport organizations can be applied along with the model of Sowa et al. (2004).	Program effectiveness and management effectiveness were assessed separately.	The study only focused on board members' and sport members' perceptions.
Winand, Zintz, Bayle & Robinson	2010	Multi-Dimensional (global performance)	Nonprofit sport governing bodies	Five dimensions were found critical for organizational performance assessment: sport, customer, communication & image, finance and organization.	Multidimensional approach of OP assessment within a qualitative-quantitative approach. Takes into account the priorities of strategic and operational goals.	Quantitative measurements of intangible objectives. Suppose that Olympic sport governing bodies reach the same goals.

Table 2: Literature review of dimensions of organizational performance in non-profit sport organizations regarding inputs

Macro dimension	Authors'dimension	Authors	Definition and/or measure(s) used
Size: membership (1)	Input-human resources	Chelladurai et al., 1987	Membership size
	Number of members	Koski, 1995	Total number of members in the organization
	Size: athletes	Papadimitriou, 2002	Number of athletes served by the organization
	Human resources	Madella et al., 2005	Membership (athletes, officials, coaches) and participation in competitions
Size:Volunteers (2)	Number of volunteers	Papadimitriou, 2002	Total number of active volunteers in the organization
Size: technical staff (3)	Number of technical staff	Papadimitriou, 2002	Total number of technical staff: coaches, trainers and assistants
	Number of scientific staff	Papadimitriou, 2002	Total number of scientific staff:
Financial resources acquisition (4)	Financial resources acquisition	Frisby, 1986	Total operating budget, increase in financial support from the government
	Input-monetary resources	Chelladurai et al., 1987	Procurement of funds from business and private donors (not grants) (e.g. private donations, corporate sponsorship)
	Ability to obtain income	Koski, 1995	Finding sponsors and other supporters
	Total resources	Papadimitriou, 2002	Amount of total resources
	Public resources	Papadimitriou, 2002	Amount of public resources required to operate

Table 3: Literature review of dimensions of organizational performance in non-profit sport organizations regarding throughputs

Macro dimension	Authors'dimension	Authors	Definition and/or measure(s) used
Internal atmosphere (1)	Internal atmosphere	Koski, 1995, p.86	"How well club members get along with each other and the kind of atmosphere prevailing among the members."
	Social internal performance	Bayle & Madella, 2002	Improving social atmosphere and implication of the internal stakeholders (degree of internal stakeholders' satisfaction and relationships between them)
Organizational operating (2)	Organizational performance	Bayle & Madella, 2002	Quality of the functioning and organizational reactivity
	Organization	Winand et al., 2010	Average qualification of administrative and sport paid staff, average experience of administrative and sport paid staff, paid staff turnover over two years and board turnover over two years
Process efficiency (3)	Efficiency of the throughput process	Koski, 1995	Breadth of operations divided by income and breadth of operations divided by the number of staff
External communication & contacts (4)	General level of activity : partnership	Koski, 1995	Number of cooperative partners
	Institutional communication and partnerships	Madella et al., 2005	Relationship with other sport institutions, Web communication
	Communication and image	Winand et al., 2010	Percentage of members receiving information and Expenditure on spreading information per member, percentage of promotion expenditure in comparison with the expenditure intended for members
Financial independence (5)	Economic and financial performance	Bayle & Madella, 2002	Access to financial resources, resources diversification, capacity on self-financing
	Financial survival	Winand et al., 2010	Percentage of the total expenditure covered by non-grant financial resources, percentage of private financial resources in comparison with grants.
	Finances 1	Madella et al., 2005	Input of financial resources, distribution of funding streams (private/public)
Financial resources management (6)	Finances 2	Madella et al., 2005	Cost structure
	Financial resources management	Winand et al., 2010	Grants per member and financial return for members
Elite sport programs (7)	Throughput-elite	Chelladurai et al., 1987	Processes and activities in elite sport (e.g. clinics provided for national team members, coaches and officials, working relationships, consensus)
Mass sport programs (8)	Throughput-mass	Chelladurai et al., 1987	Processes and activities in mass sport (e.g. coordination, communication, technical assistance, working relationships)

Table 4: Literature review of dimensions of organizational performance in non-profit sport organizations regarding outputs

Macro dimension	Authors'dimension	Authors	Definition and/or measure(s) used
Achieving elite sport success (1)	Performance excellence	Frisby, 1986	World (average) ranking of each Olympic team and controlled by the number of competing countries, changes in the world ranking.
	Output-elite	Chelladurai et al., 1987	Goal attainment in elite sport
	Achievement-oriented	Koski, 1995	Success of athletes and teams in competitive sport
	Elite sport results	Bayle & Madella, 2002	Sport results performance (in high level competitions)
	International competitive results	Madella et al., 2005	Production of elite international performance
	Elite sport: success	Winand et al., 2010	Sport results in official international competitions
Achieving mass sport participation (2)	Output-mass	Chelladurai et al., 1987	Goal attainment in mass sport (e.g. continued commitment of participants in mass sport programs, turnover of participants, social benefits of mass sport)
	Participation -oriented	Koski, 1995	Share of active participants
	Membership	Bayle & Madella, 2002	Evolution of the number of members in the organization
	Development of members	Winand et al., 2010	Percentage of number of members increasing in comparison with previous year
Services to society (3)	Social external performance	Bayle & Madella, 2002	Social legitimacy and effects of NSO activities on the society
	Sport values and services to society	Winand et al., 2010	Percentage of the number of members less than 18 years old in comparison with total members, percentage of women members increasing in comparison with previous year
Services to members (4)	General level of activity: services	Koski, 1995	Number of advantages offered to members
	Number of sports	Papadimitriou, 2002	Number of sports for which services are offered by the club
	Sport for all	Winand et al., 2010	Number of sport monitors for 1000 members, sport services expenditure/member
Services to elite athletes (5)	Sport programs	Papadimitriou, 2002	Number of athletic programs organized
	Elite sport: services	Winand et al., 2010	Expenditure for high performance athletes per internal competition & number of athletes participating in international competition
Services delivered (6)	General level of activity: operation	Koski, 1995	Breadth of operation
	Volume of services delivered.	Madella et al., 2005	Services for athletes, services for leisure participants, Educational services

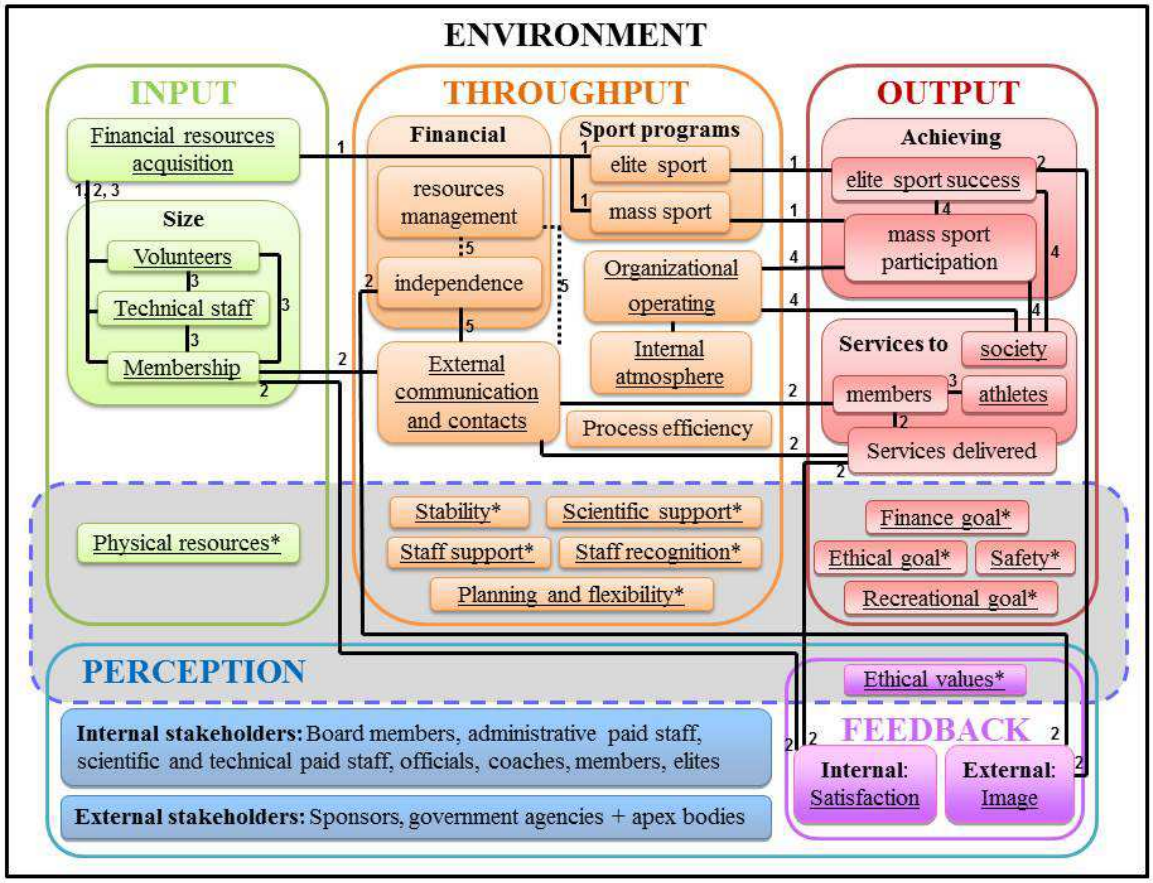
Table 5: Literature review of dimensions of organizational performance in non-profit sport organizations regarding feedbacks

Macro dimension	Authors'dimension	Authors	Definition and/or measure(s) used
External feedback: image	General level of activity: image	Koski (1995, P.87)	"Images that outsiders have of the activities of the club" How widely the club is known (WK)
	Promotional performance	Bayle & Madella (2002)	Notoriety and image, evolution of media exposure, TV coverage between 1993 and 1997
Internal feedback: satisfaction	Estimation of the general level of activity	Koski (1995)	Estimation of stakeholders' satisfaction by district manager

Table 6: Literature review of dimensions of organizational performance in non-profit sport organizations regarding stakeholders' perceptions

Perceptions of …	Authors and *approach*	Dimensions highlighted by authors regarding perceptions of performance (effectiveness)			
		Input	Throughput	Output	Feedback
Board members, coaches, officials, scientific and administrative staff, elite athletes	Papadimitriou & Taylor, 2000 *Multiple constituency approach*		Calibre of the board and external liaisons, interest in Athletes, internal procedures, long-term planning, sports science support		
University administrators, Faculty members, student-athletes, athletic department administrator, coaches, officials	Wolfe et al. 2002 *Multiple constituency approach*	Resource management		Performance on the field, education	External profile, ethics, institutional enthusiasm
Board members, paid employees, subcommittee members, players, state representatives, sponsors, and government agencies.	Shilbury & Moore, 2006 *Competing values approach*	Resources	Availability of information, stability, flexibility, planning, cohesive workforce (motivation recognition and work harmony), skilled workforce (professional support and volunteer support).	Productivity	
Board members and members	Balduck, 2009 *Competing values approach*	Financial resources, human capital, sports members, sport accommodation, sport material	Communication, information, atmosphere, education, stability	financial goal, social goal, societal goal, competition goal, recreation goal, safety	Satisfaction

Figure 1: Unified model of non-profit sport organizations performance



Note. The lines represent significant strong relationships between macro-dimensions according to authors' correlations following the sequence input-throughput-output (all the correlations less than .4 are not included). Critical macro-dimensions for stakeholders are underlined. The asterisk symbol [*] represents dimensions that emerged from stakeholders approaches but do not match with dimensions highlighted in studies measuring non-profit sport organizations performance.

——— : Positive correlations; ▪▪▪▪▪▪▪ : negative correlations

Numbers 1 to 5 refer to the studies below from which the strong relationships were retrieved

[1] Chelladurai et al. (1987)
[2] Koski (1995)
[3] Papadimitriou (2002)
[4] Bayle and Madella (2002)
[5] Winand et al. (2010)