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Frank Daumann (Projektleitung) · Robin Heinze ·
Jeremias Kümpel · Michael Barth · Sascha-Gregor Diethold

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Frank Daumann (Projektleitung), Robin Heinze,
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53117 Bonn
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Ansprechpartner:
Andreas Pohlmann
Tel.: +49 228 99 640 9021
E-Mail: Andreas.Pohlmann@bisp.de

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Kümpel, Jeremias; Barth, Michael; Diethold, Sascha-Gregor
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Introduction

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1.1 Need for quality and performance management in national sport-governing bodies

"In the past, [the] non-profit sector has encountered significant organizational pressures, financial challenges, and new demands and has confronted significantly more difficult business conditions. At the same time, the demand for their services continues to increase" (Rojas, 2000, p. 101). Over recent decades, the literature has identified several reasons for non-profit organizations such as national sport-governing bodies to be concerned with measuring organizational quality and performance: stakeholder pressure, public funding, environmental pressure, increasing competition, benchmarking, and professionalization. All of these reasons have been recently addressed in the literature and are therefore still relevant for non-profit organizations today.

The most important reason seems to be the need to satisfy multiple stakeholders with their varying perspectives on the organization (Chelladurai & Haggerty, 1991, p. 127; Koh-Tan, 2011, p. 217; Kraft, Jauch, & Boatwright, 1996, pp. 102–103; Král, Tripes, & Pirožek, 2013, p. 110; Lock, Filo, Kunkel, & Skinner, 2015, p. 362, O'Boyle & Hassan, 2014, 2014, p. 300; Papadimitriou, 2007, p. 572; Sowa, 2011, p. 1; Sowa, Selden, & Sandfort, 2004, p. 712; Winand, Rihoux, Robinson, & Zintz, 2013, p. 739; Winand, Vos, Claessens, Thibaut, & Scheerder, 2014, pp. 121–122; Winand, Zintz, Bayle, & Robinson, 2010, p. 279). Relevant stakeholders are resource providers such as private and public funders, recipients of organizational outputs, shareholders, the government, members of an organization such as employees or board members, and the general public (Chelladurai & Haggerty, 1991, p. 127; O'Boyle & Hassan, 2014, p. 300; Papadimitriou, 2007, p. 572). In addition, special stakeholders for national sport-governing bodies are athletes, sponsors, coaches, officials, and regional sport organizations (Daumann & Römmelt, 2013, p. 109; O'Boyle & Hassan, 2014). These constituents may have different and conflicting goals for the organization (Chelladurai & Haggerty, 1991, p. 127). Therefore, the organization needs to establish a system that can meet the varying needs and expectations of its stakeholders (Koh-Tan, 2011, p. 217; O'Boyle & Hassan, 2014, p. 300; Papadimitriou, 2007, p. 572; Winand et al., 2013, p. 739). By measuring performance and quality and sharing this information with stakeholders, organizations can convince their stakeholders that scarce resources and volunteer efforts have not been wasted (Tayşir & Tayşir, 2012, p. 221). By meeting their stakeholders' expectations, organizations gain legitimacy as well as improved access to support and resources (Lock et al., 2015, p. 362).

Even though they are independent entities, many non-profit organizations rely heavily on public funding to survive and provide their services (Bayle & Robinson, 2007, p. 250; Eydi, 2015, p. 464; Herman & Renz, 2004, p. 694; Papadimitriou, 1998, p. 169). Thus, understanding and measuring organizational quality and performance are the "outcome of increased government funding coupled with heightened commercial activity" (Shilbury & Moore, 2006, p. 6).

Non-profit organizations "operate in environments which limit their decision-making alternatives" (Papadimitriou, 1998, p. 169), as external factors, the sport culture, public expectations, government policies and funding assistance policies influence the survival and behavior of organizations (Robinson & Minikin, 2011, p. 220). Greater environmental turbulence and complexity has raised awareness of institutional pressures and therefore the need for organizations to monitor and adapt to constant environmental changes (De Knop, Van Hoecke, & de Bosscher, 2004, p. 63; Papadimitriou, 1998, p. 169; Skinner, Stewart, & Edwards, 1999, p. 175; Toepler & Anheier, 2004, p. 253).

With increasing internationalization and the rising number of non-profit organizations, such organizations can no longer ignore issues of competitive strategies (Cameron, 1986, p. 539; O'Boyle & Hassan, 2014). Non-profit organizations are increasingly challenged by for-profit institutions invading markets previously considered the exclusive domain of the first ones (Rojas, 2000, pp. 97–98), and therefore they need to manage their performance and quality.

Stakeholder orientation, public funding, increasing environmental turbulence and complexity, and the need for competitive strategies have raised the awareness and need for a more professionalized approach to non-profit management, and with this a stronger performance and quality orientation (Chelladurai, Szyszlo, & Haggerty, 1987, p. 111; O'Boyle & Hassan, 2014; Shilbury & Moore, 2006, pp. 5–6; Toepler & Anheier, 2004, p. 253; Winand et al., 2010, pp. 279–280). Non-profit organizations need to become more accountable and to participate in benchmarking (Jun & Shiau, 2012, pp. 632–633; Liket & Maas, 2015, p. 268; Madella, Bayle, & Tome, 2005, p. 208; Shilbury & Moore, 2006, p. 6; Toepler & Anheier, 2004; Winand et al., 2013, p. 739; Winand et al., 2010, pp. 279–280).

1.2 Study purpose

For all the above-listed reasons it is clear that there is an increased need for quality and performance management. However, there is still no widely accepted system for measuring the performance and quality of organizations. In particular there is no such measurement system for national sport-governing bodies.

Therefore, the aim of the present study is to develop a standardized system to measure the quality and performance of national sport-governing bodies that takes into account the different perspectives of the organizations' stakeholders.

This measurement system is intended to provide a benchmark for all sports associations and provide the basis for regular monitoring of quality and performance. The measurement system should thus provide a solid foundation for long-term management decisions.

The study's purpose is between management and measurement with a greater focus on measurement. Management is based on measurement and reporting and results in "improvements in behavior, motivation and processes and promotes innovation" (Radnor & Barnes, 2007, p. 393). This means that it is more concerned with the present and the future than it is with the past (O'Boyle & Hassan, 2014, p. 302). Measurement, defined as constant monitoring and reporting of observable and quantifiable characteristics, provides the data needed to establish where performance and quality can be improved. It is more past-oriented (Barman, 2007, p. 102; O'Boyle & Hassan, 2014, p. 302) and consists of "rules or procedures for assigning numbers to attributes to represent them quantitatively" (Steers, 1975, p. 553).

The motivation of organizations to engage in performance and quality measurement can be divided into broad categories of drivers (Barman, 2007, p. 104; Lee & Nowell, 2015, p. 310; Liket, Rey-Garcia, & Maas, 2014, p. 175):

- Intraorganizational performance measurement is seen as a managerial tool to improve the organization.
- Extraorganizational performance measurement is seen as a symbolic activity to enhance legitimacy and credibility in the eyes of the organizational stakeholders.

Critics of the use of measurement systems have shown that they result in the standardization of services, inhibit innovation, produce mission drift, and lead to conflicts over accountability to different constituencies (Barman, 2007, p. 103).

1.3 National sport-governing bodies

National sport-governing bodies (NSGBs) play an important role in society. They depend on state resources to provide services and programs (Eydi, Abbasi, & Ibrahim, 2013, p. 120). The objective of sport organizations is the promotion of sports, both within the nation and in international competitions (Papadimitriou & Taylor, 2000, p. 28).

Not-for-profit (NPO) organizations should be distinguished from governmental as well as from for-profit organizations. In this context, the non-profit status is officially formalized in mission statements. Nevertheless, the mission statements vary greatly among the different non-profit organizations and are not necessarily clear and comprehensible. Moreover, NPOs are primarily guided by material objectives. Other relevant criteria include collective ownership, which means that profits that are generated regularly are not distributed to the carriers of non-profit organization and the volunteer staff (Liket et al., 2014, p. 174).

Sports organizations have different functions: the ordinal function, by advocating a uniform organization and sports development; the program function, by giving decision-making aids and models for the successful work of the member organizations; and the service function, by representing and enforcing members' interests (Braun & Reymann, 2013, p. 33). National sports organizations are responsible for the provision of sports services to the community. This includes the delivery of programs designed to foster participation, and those required to identify and develop elite athletes (Shilbury & Moore, 2006, p. 6). Sports federations track multiple goals, are active with serveral interest groups, develop their activities in various fields (mass sport versus competitive sport), and give regard to changes in and growing demands from the external environment (Eydi et al., 2013, p. 119).

NPOs have to create a system that meets the different needs and expectations of respective stakeholders. For this reason, they have the goal of increasing stakeholder value. In contrast to companies, sports organizations do not primarily seek profit. Their main goal is to offer an effective service (O'Boyle & Hassan, 2014, p. 300). NPOs are not responsible to owners or shareholders. Legally, the recipients of benefits have few rights in relation to the actions of NPOs (Barman, 2007, p. 104).

Sports organizations receive their financial means from different sources. The money flows from both sides of the sport system (Wicker & Breuer, 2014, p. 931). National sporting governing bodies rely on federal and state government subsidies, complemented by revenues from memberships. They also receive financial resources from competition and program fees, and (depending on the size of the organization) sponsorship (Shilbury & Moore, 2006, p. 6).

The special appreciation of the potential of sports organized by associations and federations to have positive effects in civil society is shown in the classical concept of partnership-based collaboration. As a result, the German state has developed a comprehensive and complex sports promotion program (Braun & Reymann, 2013, p. 35).

The management of NPOs in sport has structural features. National sports governing bodies are organized in a basic democratic way which usually leads to a lengthy decision-making process. There are also volunteers and full-time staff. Sports organizations depend on the public sector for financial resources. An additional point is that the quality of the results in national sports governing bodies depends on different stakeholders who have a great impact on the organizational perfomance (Daumann & Römmelt, 2013, p. 91). It should also be mentioned that there are some drawbacks with respect to NPOs. Firstly, there are tensions between professional staff and volunteers. Secondly, there is the need for governmental support and private funding such as sponsoring and promoting mass participatory programs versus supporting elite athletes, and the contradictions between NPOs and profit cultures (Shilbury & Moore, 2006, p. 16).

The strategic objectives from national sport-governing bodies are often intangible and difficult to measure. NPOs have to meet their stakeholders' heterogeneous expectations and needs, and this consequently has an influence on their objectives. Due to the fact that NPOs receive their resources from public authorities, their finances are constrained. Further, paid staff and volunteers are deployed who contribute to organizational success. Therefore, professional activities are not clearly defined in national bodies as they are in private organizations (Winand et al., 2010, p. 281). NPOs are increasingly managed by staff members (Shilbury & Moore, 2006, p. 5).

Every non-profit organization has a multitude of constituencies and has to work out a relationship with each of them. For national sport-governing bodies special stakeholders are athletes, sponsors, coaches, officials, and regional sports organizations (Daumann & Römmelt, 2013, p. 109; O'Boyle & Hassan, 2014, p. 299). There is no price mechanism that reflects the interets of clients, staff, volunteers, and stakeholders.

In what follows, we will describe the individual stakeholders of national sport-governing bodies and demonstrate the multiple and contradictory expectations of stakeholders.

Internal constituent groups

- members of the board of directors (e.g. president, vice president, secretary general, treasurer, directors-at-large)
- paid administrative staff (e.g. general managers, accountants, secretaries, press and public relations officers, program coordinators
- technical staff (e.g. head coaches, national coaches, doctors, masseurs, physiotherapists, psychologists, physiologists
- international officials (e.g. referees, scores, linesmen)
- elite athletes

External constituent groups

- German Olympic Sports Confederation (DOSB)
- sponsors
- policy makers

Figure 1: Various stakeholders in national sport-governing bodies (based on Papadimitriou, 2007, S. 576)

As already mentioned, stakeholders have different interests and expectations which depend on the position of the stakeholders and their relationships to the organization. It may be important for an NPO to place particular importance on satisfying the needs of one or a limited number of stakeholders based on the level of financing or support they are receiving from those stakeholders (Papadimitriou & Taylor, 2000, p. 25). "Furthermore, as the organization grows and the network of stakeholders is increased, meeting the expectations of all the various stakeholders presents a very complex issue for the management team" (O'Boyle & Hassan, 2014, p. 307). O'Boyle and Hassan (2014, p. 307) add that different stakeholders use different criteria in their assessment of an organization. Some of these criteria may be conflicting and some may change over time.

The assessment of the effectiveness of NPOs depends on different constituent groups. These have contradictory points of view and the decision-making group is usually critical since all have different interests. Different groups assess effectiveness in various ways, depending on whether their own interests have been fulfilled. It is therefore vital to provide professional consultation for external stakeholders such as policy makers, members and sponsors as well as consulting internal groups such as board members, paid employees, and athletes (Papadimitriou, 2007, p. 572).

Papadimitriou (2007, p. 576) has characterized five internal constituent groups (i.e. members of the board of directors, paid administrative staff, technical staff, international officials and elite athletes) that appear in all sport organizations. He has also identified one external group (i.e. general Secretariat of Sports). In Germany, the German Olympic Sport Confederation, Deutsche Olympischer Sportbund (DOSB), is comparable to the general secretariat of sports. “The role of each of the above interest groups to influence organizational activity varies considerably” from one group to another (Papadimitriou, 2007, p. 576).

Members of the board of directors are, for instance, the president, the vice-president, the secretary general, the treasurer and the directors-at-large. They take the lead role in an association and are primarily responsible for administrative tasks. They are elected by the club members. Their interests within the association can reflect the association’s actions and the results of those actions. Members of the board of directors often work on an honorary basis and usually don’t have administrative training (Papadimitriou, 2007, p. 576). They work with paid administrative staff to determine policies, participate in advisory committees, and assist in fundraising (Koh-Tan, 2011, p. 220).

Another internal constituent group consists of paid administrative staff. General managers, accountants, secretaries, press and public relations officers, program co-ordinators and typists belong to this group. NSGBs are dependent on the paid administrative staff to master the current growth of the membership and organizational activities, and the increasing bureaucracy. The group is responsible for providing the service and bears little or no decision-making powers.

The technical staff constists of head coaches, national coaches, assistant national coaches, regional coaches and doctors, masseurs, physiotherapists, psychologists, and physiologists. They are involved in the technical matters of the sport organization. The group is particularly important for the operation and performance of the sport organization. This is because winning medals in different competitions and the international success of the sport is gaining increased attention in the institutional environment. Success brings with it funding, prestige and publicity.

Coaches make an important contribution to the overall effectiveness of sports organizations. The importance of coaching is internationally recognized (MacLean & Chelladurai, 1995, p. 195). Coaches supervise the athletes and work on a full-time contract or voluntarily.

International and national officials including referees, scores and linesmen are also part of the internal constituent group. They play an active role in the functioning of sport organizations and the recruitment and development of officials. A major task is the organization of championships. The promotion of this group assigned to this task is linked to the international success of an organization (Papadimitriou, 2007, p. 578).

High-performance athletes who represent the primary clientele group benefit from sports organizations. “This group has limited formal power to influence directly the decision-making of organizations to generate resources and to create uncertainty. However, it is important to mention that the athletes´ success and satisfaction are inherently connected to the performance and viability of the organizations in terms of legitimacy, resources, prestige, sport development, and power.“ (Papadimitriou, 2007, p. 582). Athletes are the prime beneficiaries of sports organizations, and they are directly affected by organizational outcomes. Organizational outcomes can be differentiated into behavioral and environmental changes, and customer (stakeholder) satisfaction (Lee & Nowell, 2015, pp. 303–308). NSGBs focus strongly on achieving good perfomance rather than on sports development. Sport organizations are committed to the main goal of performance excellence (Frisby, 1986b, p. 64; Papadimitriou, 2007, p. 578).

The DOSB belongs to the external groups and is especially important for the national sports federations. The DOSB is the umbrella organization of sports clubs and associations, and ensures their functioning and survival. It controls the resources and checks the compliance of these clubs and associations with the rules. This external group is the most important interest group for operations and actions as well. Another external group are sponsors. Sponsors support national sport-governing bodies financially. The state, too, and politicians as a group promote sports. The state is interested in sports because they increase the general well-being and thus have a positive impact on society. In addition, the promotion of elite sport is important to the state. Top performances have a prestige function.

As mentioned above, the DOSB is the umbrella organization of sports clubs and organizations in Germany. It is the largest association of individuals involved in sports. On the levels below are several national, state, and regional sport-governing bodies (Wicker & Breuer, 2014, p. 931).

The DOSB currently has about 27.5 million members. There are 98 member organizations that are divided into sports federations, sports associations and associations with special tasks, for example the youth sports association and the German company sports association (Braun & Reymann, 2013, p. 33). Sport-governing bodies play a determining role in the sports system in Germany (Wicker & Breuer, 2014, p. 929). The sports system consists of numerous associations that are responsible for organizations of different sports and different levels. The system is organized like a pyramid (Daumann & Römmelt, 2013, p. 25).

Sports clubs and athletes form the bottom of the system. Sports confederations and associations represent two different streams of sports governing bodies. Therefore, the sports system is divided at the middle level. Sport confederations comprise sports clubs in one area (state, region district, or community), while sport associations include all clubs of one specific sport (Braun & Reymann, 2013, p. 35).

Within this complex organizational structure, the DOSB has no authority to issue instructions to its member organizations. All member organizations have professional, organizational and financial independence. The DOSB and the sports federations have the legal status of a registered association (Braun & Reymann, 2013, p. 34). Accordingly, sports organizations are non-profit organizations (NPO) which means that, though they are able to generate profits, their members cannot benefit from the profits because these need to be reinvested (Wicker & Breuer, 2014, p. 931).

Table 1: German Olympic Sports Federations (DOSB, 2016, p. 4)

	Sports federation	Members ’16
1	Deutscher Fußball-Bund	6,969,464
2	Deutscher Turner-Bund	4,963,252
3	Deutscher Tennis Bund	1,400,940
4	Deutscher Schützenbund	1,342,915
5	Deutscher Alpenverein	1,095,889
6	Deutscher Leichtathletik-Verband	819,960
7	Deutscher Handball-Bund	756,987
8	Deutsche Reiterliche Vereinigung	690,995
9	Deutscher Behindertensportverband	642,954
10	Deutscher Golf Verband	640,181
11	Deutscher Tischtennis-Bund	560,644
12	Deutscher Schwimm-Verband	559,958
13	Deutscher Skiverband	554,443
14	DLRG (Deutsche Lebens-Rettungs-Gesellschaft)	548,439
15	Deutscher Volleyball-Verband	430,098
16	Deutscher Tanzsportverband	210,327
17	Deutscher Basketball Bund	195,453
18	Deutscher Badminton-Verband	188,380
19	Deutscher Segler-Verband	187,610
20	Deutscher Karate Verband	157,426
21	Deutscher Judo-Bund	150,279
22	Bund Deutscher Radfahrer	137,884
23	Deutscher Kanu-Verband	118,406

24	Deutscher Verband für modernen Fünfkampf	115,110
25	Deutscher Motoryachtverband	107,998
26	Deutscher Aero Club	102,888
27	Deutscher Schachbund	89,165
28	Deutscher Ruderverband	83,830
29	Deutscher Hockey-Bund	82,627
30	Deutscher Kegler- und Bowlingbund	81,380
31	Deutscher Boxsport-Verband	71,075
32	Deutscher Ringer-Bund	63,631
33	Verband Deutscher Sporttaucher	62,153
34	American Football Verband	55,305
35	Deutschland Deutsche Triathlon-Union	55,270
36	Deutsche Taekwondo Union	55,009
37	Deutscher Ju-Jutsu-Verband	43,575
38	Snowboard Verband Deutschland	38,015
39	Deutscher Rollsport- und Inline Verband	34,628
40	Deutscher Eisstock-Verband	28,367
41	Deutsche Billard-Union	27,837
42	Deutscher Eishockey-Bund	24,740
43	Deutscher Fechter-Bund	24,511
44	Deutscher Baseball und Softball Verband	22,840
45	Bundesverband Deutscher Gewichtheber	20,891
46	Deutscher Motor Sport Bund	20,885
47	Deutscher Boccia-Boule- und Pétanque-Verband	20,607
48	Bundesverband Deutscher Kraftdreikämpfer	19,340
49	Deutsche Eislauf-Union	18,651
50	Deutscher Rugby Verband	14,304
51	Deutscher Sportakrobatik-Bund	14,035
52	Floorball-Verband Deutschland	11,512
53	Deutscher Squash Verband	11,412
54	Deutscher Dart Verband	10,005
55	Deutscher Rasenkraftsport- und Tauzieh-Verband	9,781

56	Deutscher Minigolfsport Verband	9,249
57	Deutscher Gehörlosen-Sportverband	8,144
58	Bob- und Schlittenverband für Deutschland	6,568
59	Deutscher Wasserski- und Wakeboardverband	2,612
60	Deutsche Eisschnellauf-Gemeinschaft	1,405
61	Deutscher Curling Verband	724
62	Deutscher Skibob-Verband	335

When it comes to assessing the perfomance of NPOs, it can be said that various levels of the NPO pyramid generate different outcomes. At the same time, the persons working at different levels are characterized by their individual experience and knowledge. Therefore, the effectiveness of organizational perfomance needs to be judged by different stakeholders. Individual groups cannot be omitted (Herman & Renz, 1997, p. 186). However, the measurement of the performance and effectiveness of national sports associations is complex because athletes are both members and customers, and play a special role within the organization (Koh-Tan, 2011, p. 223).

The performance of national sports associations is further influenced by increasing pressure from various stakeholders (O’Boyle & Hassan, 2014, p. 299). The promotion of sports is seen as a governmental task. The state assumes social responsibility so that social forces, such as those of sport, can be fully developed (Braun & Reymann, 2013, pp. 33–34).

In summary, national sport-governing bodies can be considered as hybrid organizations because of their social orientation and because they are not allowed to make a profit. Human resources in these organizations consist of paid staff and volunteers. In addition, sports organizations have a mixed economy and are regulated by a national as well as an international sports system (Bayle & Robinson, 2007, p. 250).

1.4 Developing a measurement system

Developing a system to measure the performance and quality of national sport-governing bodies requires a systematic approach (Asif, Raouf, & Searcy, 2013, p. 3103; Giere, Wirtz, & Schilke, 2006, p. 683; Hildebrandt & Temme, 2006, p. 619; Saraph, Benson, & Schroeder, 1989, pp. 819–824). We therefore followed the instrument development process shown in Figure 2.

The first four steps cover the theoretical foundation of the construct that is to be measured and lead to an initial set of measurement items. The model designs are dependent on the semantic conception of the construct and the statistical opportunities to test the indicators during the following steps of the instrument development process (Hildebrandt & Temme, 2006, p. 620).

As a first step, researchers have to clearly define the construct domain with all its facets, based on a literature review, to provide the theoretical basis for the measurement (Eberl, 2006, p. 655; Giere et al., 2006, p. 683; Hildebrandt & Temme, 2006, pp. 619–623).

Based on the conceptual definition, researchers should identify and define dimensions[1] that capture all aspects of the domain (Giere et al., 2006, p. 683; Hildebrandt & Temme, 2006, p. 619; MacKenzie, Podsakoff, & Jarvis, 2005, p. 726).

As a third step, researchers have to choose an initial set of indicators to measure all dimensions of the construct appropriately. Like the definition of the concept and its dimensions, the identification of measurement items should be based on a literature review. In addition one could include discussions with experts (Giere et al., 2006, p. 683; Hildebrandt & Temme, 2006, p. 620; MacKenzie et al., 2005, p. 726).

The fourth step comprises the specification of the measurement model and the structural model. Researchers have to specify whether their models are reflective or formative in nature (Diamantopoulos & Siguaw, 2006, p. 274; Giere et al., 2006, p. 683; MacKenzie et al., 2005, p. 726). “This requires a clear conceptual de-

[1] Saraph et al. (1989) refered to dimensions as “critical factors.” Asif et al. (2013) call them “key measures.”

finition of the construct, generation of a set of measures fully representing the domain of the construct, and careful consideration of the relationships between the construct and its measures" (Jarvis, MacKenzie, & Podsakoff, 2003, p. 213).

During the design of the questionnaire, the model specifications should be taken into account so that the need for extra indicators is anticipated early in the research process. Especially in the case of formative indicators, researchers need to include reflective indicators for the latent constructs to achieve identification of the models (Diamantopoulos & Siguaw, 2006, p. 267; Jarvis et al., 2003, pp. 213–215; MacKenzie et al., 2005, p. 726). Once the measurement model has been formally specified, the next step is to collect data for the purposes of evaluating and purifying the measures (Giere et al., 2006, p. 683; MacKenzie et al., 2005, p. 727). After collecting data, the sixth step is item purification. Ideally this is based on a series of preliminary studies (Hildebrandt & Temme, 2006, p. 620). The pre-test and the measurement purification step are used to refine the items and finalize the questionnaire. This is done through a detailed item analysis and leads to the final measurement system.

By collecting new data, the model can be evaluated as the eighth step of the instrument development process. In this step researchers can refer to the methods of refinement and measurement purification to validate the measurement models (Hildebrandt & Temme, 2006, p. 620; MacKenzie et al., 2005, p. 728).

Up to now there has been no evidence in the literature of a consensus regarding the best or even an acceptable measurement system for quality and performance (Cameron, 2010, p. xx). Consensus can be found only on the idea that quality and performance should be operationalized through multiple criteria (Baruch, 2006, pp. 41–42; O'Boyle & Hassan, 2014, p. 305).

While early research focused mainly on measuring quality and performance in one dimension, it appears that today there is consensus that quality and performance measurement is best served by a multi-dimensional approach. This is because of the multiple goals of an organization and the different emphases placed on these goals by various constituencies (Baruch, 2006, p. 60; Chelladurai & Haggerty, 1991, p. 127; Chelladurai et al., 1987, p. 112;

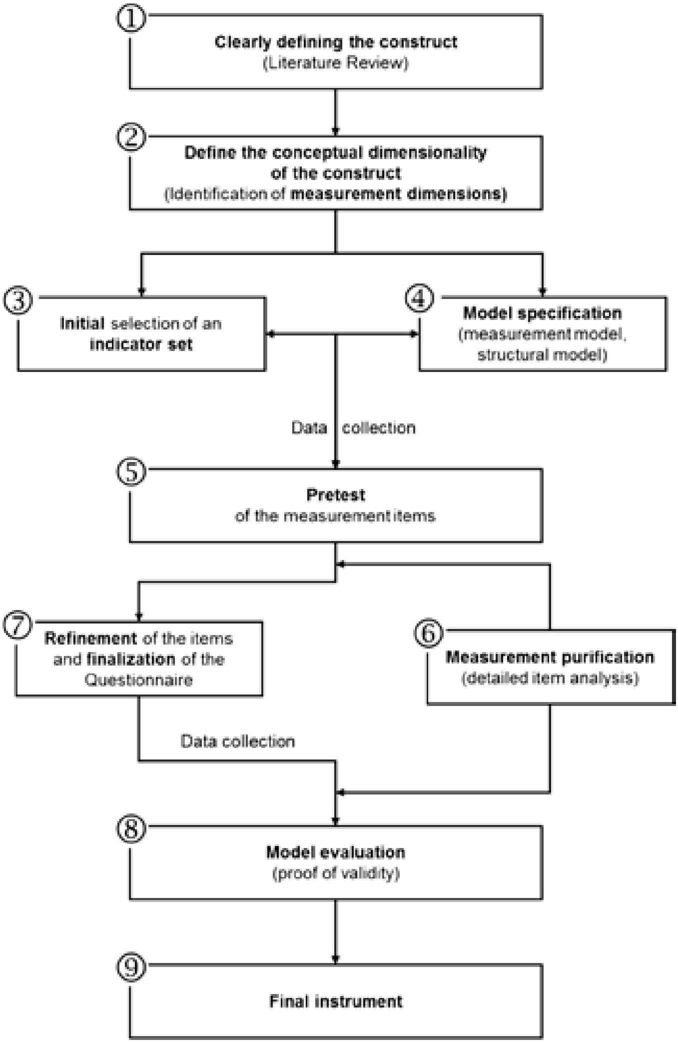

Figure 2: Instrument development process (based on Saraph et al. (1989, p. 819); Asif et al. (2013, p. 3103); Giere et al. (2006, p. 684) and MacKenzie et al. (2005, p. 725))

Heckl & Moormann, 2010, p. 122; Herman & Renz, 2008, p. 401; Lecy, Schmitz, & Swedlund, 2012, p. 445; Mitchell, 2015, p. 40; O'Boyle & Hassan, 2014, p. 303; Rojas, 2000, p. 98; Steers, 1975, p. 547; Tayşir & Tayşir, 2012, pp. 222–223).

Today, in both general organizational theory and the study of not-for-profit organizational performance, the use of a multi-dimensional approach that can assess multiple, even paradoxical, performance criteria is widely accepted (Cameron & Whetten, 1996, p. 278; Heckl & Moormann, 2010, p. 122; Mitchell, 2015, p. 40; O'Boyle & Hassan, 2014, pp. 303–305; Sowa, 2011, p. 2; Tayşir & Tayşir, 2012, p. 222,223; Winand et al., 2013, p. 741; Winand et al., 2010, pp. 284–285). The multi-dimensional approach refers to the "ability to acquire and process properly human, financial and physical resources to achieve the goals of the organization" (Madella et al., 2005, p. 209), integrates internal and external measures and seeks to include how well organizations operate and deliver goods or services to their customers (Forbes, 1998, p. 186; Sowa, 2011, p. 2). Thus multi-dimensional approaches focus on relationships between important variables as they jointly influence organizational performance and quality (Steers, 1975, p. 547).

The primary task in developing a measurement system is to determine what the appropriate measures are (Baruch, 2006, p. 42; Cameron, 1986, p. 541; Sowa, 2011, p. 3). The assumption that organizational performance quality is a multi-dimensional construct requires the measurement system to consist of measures with some meaning and value to all constituent groups. In addition the measures should be general enough to apply to all organizations under investigation (Papadimitriou, 2007, p. 577).

Thus, researchers have to follow two steps to find an appropriate measurement system. First, they have to choose basic general dimensions that are generic and represent a higher level of abstraction. Second, they have to define indicators for each dimension that are more specific and measurable, and that represent the organizational level (Asif et al., 2013, p. 3103; Heckl & Moormann, 2010, p. 120; Ishaq Bhatti, Awan, & Razaq, 2014, p. 3128; Madella et al., 2005, p. 211; O'Boyle & Hassan, 2014, p. 309).

"Finally, this measurement needs to be carried out using appropriate methods. This focuses on assembling the required supporting information through 'data collection.' The data collection could be carried out using different methods including surveys" (Asif et al., 2013, p. 3103).

Literature review and identification of measurement dimensions

2

The first step in developing a measurement system is a literature review in order to provide a comprehensive set of dimensions.

The body of literature capturing quality management and organizational performance is extensive. It covers articles in journals as well as books and book chapters. To define the dimensions pertaining to quality and performance, documents of institutions like the European Foundation for Quality Management (EFQM) are also a valuable source of information. Together all these sources provide a vast array of information on both the quality and performance of organizations.

To review this wide range of literature to find appropriate dimensions for measurement we conducted a narrative conceptual review. A narrative conceptual review aims to summarize and critique a body of literature, and draw conclusions about the topic of interest (Baumeister & Leary, 1997, p. 312; Cronin, Ryan, & Coughlan, 2008, p. 38). The body of literature is made up of the relevant studies and knowledge that address the particular field of interest (Cronin et al., 2008, p. 38). These studies provide a comprehensive background for understanding current knowledge and they highlight the significance of new research.

Narrative conceptual reviews are not identical to standard systematic reviews. They do not attempt to review all literature, as in a Cochrane-style review. They are typically selective in the material they use, and the criteria for selecting specific sources for review are not always apparent to the reader. “This type of review is useful in gathering together a volume of literature in a specific subject area and summarizing and synthesizing it” (Cronin et al., 2008, p. 38).

Even though narrative conceptual reviews are selective, they still follow a systematic search process. This process is characterized by the following elements (Lilford et al., 2001, p. 37; Murphy, 2012, p. 90).

› Searching widely, using disparate databases and sources (minimum of 2–3 credible databases), and providing information on the databases accessed and terms used to conduct the search.

- Building in safeguards to reduce potential biases, e.g. by using multidisciplinary teams.

- Allowing some overlap in the various stages of the review process, i.e. searching, analysis, and write-up, so that the precise nature and scope of the review can be clarified.

- Describing inclusion and exclusion criteria as well as time limits.

We used these strategies for our review to reduce the effects of reviewing irrelevant papers and of introducing bias. Table 2 provides a summary of our research process.

To synthesize our acquired knowledge, we reviewed all articles and evaluated their overall quality. Evaluation included the assessment of similarities and differences between publications as well as the recognition of themes. The structure of the following sections is based on our synthesis of the content of all the articles we used.

Table 2: Review characteristics

Databases	Since the literature on organizational performance and quality is not limited to specific scientific journals, we conducted our search primarily using scientific databases. In order to collate extant literature involving both conceptual and empirical studies on organizational performance and quality we conducted our electronic search in the following databases: • SURF • JSTOR • ScienceDirect • EBSCO Host (Business Source Premier, EconLit) • WISO • Google Scholar

Journals	In addition to our search in databases we also searched in leading journals devoted explicitly to the study of profit, non-profit, and voluntary organizations, as well as several journals from neighboring disciplines that periodically publish empirical research about organizational performance and quality management. Specifically, the following journals were included. • *Total Quality Management and Business Excellence* • *Journal of Quality Management* • *Academy of Management Journal* • *Academy of Management Review* • *Voluntas : International Journal of Voluntary and Nonprofit Organizations* • *Nonprofit Management and Leadership* • *Nonprofit and Voluntary Sector Quarterly* • *Journal of Performance Measurement* • *Performance Measurement and Metrics* • *European Sport Management Quarterly* • *International Journal of Sport Management, Recreation & Tourism* • *International Journal of Sport Management and Marketing (IJSMM)* • *Journal of Sport Management (JSM)* • *Sport Management Review*
References	To ensure the rigor and trustworthiness of our search results, we also reviewed reference material from relevant articles and literature lists of researchers working in the field so that our search through databases and journals would identify all relevant studies for the review. Additional studies were included later.