

# Performance measurement and NPOs' effectiveness: does internal stakeholders' trust matter? Evidence from Palestine

Performance  
measurement  
and NPOs'  
effectiveness

Mohammed Aboramadan <sup>ID</sup>

*Department of Economics, University of Insubria, Varese, Italy*

Khalid Abed Dahleez <sup>ID</sup>

*College of Business Administration, A'Sharqiyah University, Ibra, Oman*

Caterina Farao

*Department of Economics, University of Insubria, Varese, Italy, and*

Mohammed Alshurafa

*Department of Accounting, Heriot Watt University, Edinburgh, UK*

Received 3 July 2020  
Revised 8 September 2020  
Accepted 9 September 2020

## Abstract

**Purpose** – This study proposes a model of the effect of financial and non-financial performance measures on nonprofit organizations' (NPOs') effectiveness where internal stakeholders' trust play an intervening role in the aforementioned relationships.

**Design/methodology/approach** – Data were collected from 218 employees working at the largest Palestinian NPOs. The perceptions of these employees were used to measure the variables, and structural equation modeling was used to examine the hypotheses.

**Findings** – Results suggest that the use of financial and non-financial performance measures was positively related to NPOs' effectiveness. Internal stakeholders' trust showed a significant mediating effect between the use of performance measures and NPOs' effectiveness.

**Practical implications** – This study may be of value for NPOs' managers due to the positive effects performance measurement (PM) can have on NPO effectiveness. Managers and boards should seek to enhance their internal stakeholders' trust to achieve higher levels of effectiveness.

**Originality/value** – This study has three main contributions. First, it is one of the very few papers which empirically examines the links between PM and NPOs' effectiveness, rather than providing conceptual lens. Second, the paper investigates the role of stakeholders' trust as a mediating mechanism in the proposed model, a topic that has been neglected by NPOs governance researchers. Finally, the study uses data from the Palestinian context, contributing to the PM literature by providing evidence on the relationship between performance measures and NPOs' effectiveness from a non-Western context.

**Keywords** Effectiveness, Financial performance measures, Non-financial performance measures, NPOs, Trust, Stakeholders

**Paper type** Research paper

## Introduction

The working environment has significantly changed, requiring nearly all aspects of organizations and management to adapt appropriately (Anderson and McAdam, 2004). Today, nonprofit organizations (NPOs) operate in working environments that are characterized by complexity, ambiguity and economic limitations. Declines in aid from international donors and local governments and the intense competition between NPOs to search for sources of donations have pushed these organizations to find novel ways to deal with these continuously changing requirements (Young *et al.*, 2012) in order to foster effectiveness. Moreover, the increasing role of NPOs in contributing to socioeconomic growth in developing countries (Liston, 2008) has led to an expansion in the number of these NPOs



---

with multiple stakeholders (Cestari *et al.*, 2018). Consequently, this has increased the demands and pressures on NPOs to demonstrate the accountability of their services (Kim *et al.*, 2019) and the emphasis on the importance of measuring performance (Lee and Clerkin, 2017; LeRoux and Wright, 2010). Furthermore, performance measurement (PM) in service-based organizations is more complex than measuring performance in other settings (Yasin and Gomes, 2010). Hence, in light of these acute competitive and economic pressures, NPOs are required more than ever to demonstrate excellence in their performance in order to secure financial resources (Cairns *et al.*, 2005; Martikke, 2008). It has always been thought that competition for financial resources and innovative projects is linked to the practices of PM in NPOs (Carlson *et al.*, 2010). In developing countries, NPOs also strive to obtain staff and resources to ensure successful delivery of their goods and services and sustain excellent levels of effectiveness.

On the significance of PM in NPOs, the extant literature reveals that PM is positively associated with financial performance (Carnochan *et al.*, 2014), goal attainment (Henderson *et al.*, 2002), program and decision-making effectiveness (LeRoux and Wright, 2010; Mausolff and Spence, 2008) and goal clarity (Berman and Wang, 2000). However, although measuring performance is thought to be an important factor in influencing effectiveness and competitiveness (Gomes and Yasin, 2011; Grossman and Mccaffery, 2001), the literature provides mixed and inconclusive results (Lee, 2020). For instance, a number of studies found that PM has a positive association with NPOs' effectiveness at the organizational level (see. Grossman and Mccaffery, 2001; Mausolff and Spence, 2008). On the other hand, other studies claimed that PM diminishes the quality of improvements and NPOs' performance (Poister *et al.*, 2014). Moreover, LeRoux and Wright (2010) reported that some managers of NPOs are not persuaded of the benefits of employing PM. Likewise, Carman and Fredericks (2008) highlighted that not all NPO leaders view PM as an effective management tool; rather, many see it as a marketing and promotional instrument, which causes resources to diminish. This was supported by Julnes and Holzer (2001) who argued that resources and efforts invested in performance management implementation, rather than adoption, may have negative effects on internal stakeholders (e.g. volunteers, administrators, employees). Therefore, the assumption provided by performance management theory that PM might lead to greater levels of organizational effectiveness requires a conclusive evidence (Alexander *et al.*, 2010). The authors further elaborated that the causal links between PM and NPOs' performance are not adequately addressed. Hence, these conflicting findings call for more empirical investigation on how PM (e.g. measures, practices, systems) positively contribute to organizational success and organizational effectiveness in NPOs (Teelken, 2008).

Moreover, the mainstream literature has largely focused on general mechanisms of NPOs' governance (i.e. PM, NPOs' effectiveness), thus neglecting the essential role played by the stakeholders in these NPOs (Zollo *et al.*, 2019), such as internal stakeholders which are represented by paid employees. Furthermore, it has been argued that very few studies have examined the role of stakeholders in NPOs (Cornforth, 2012; Wellens and Jegers, 2014). Because both internal and external stakeholders are increasingly demanding a better definition of how NPOs can measure performance and ensure high levels of effectiveness (Zollo *et al.*, 2019), it is necessary to deepen this study through investigating the role of internal stakeholders' attitudes toward their NPOs.

Given the previous discussion and building on the stakeholder theory, this research proposes and empirically examines a model that explains the relationship between PM and NPOs' effectiveness. Specifically, internal stakeholders' trust is hypothesized as the underlining mechanism that governs the aforementioned relationship as shown in Figure 1. Based on the argument that including stakeholders' perceptions in evaluating NPOs' effectiveness and performance would provide a better explanation of how well NPOs

---

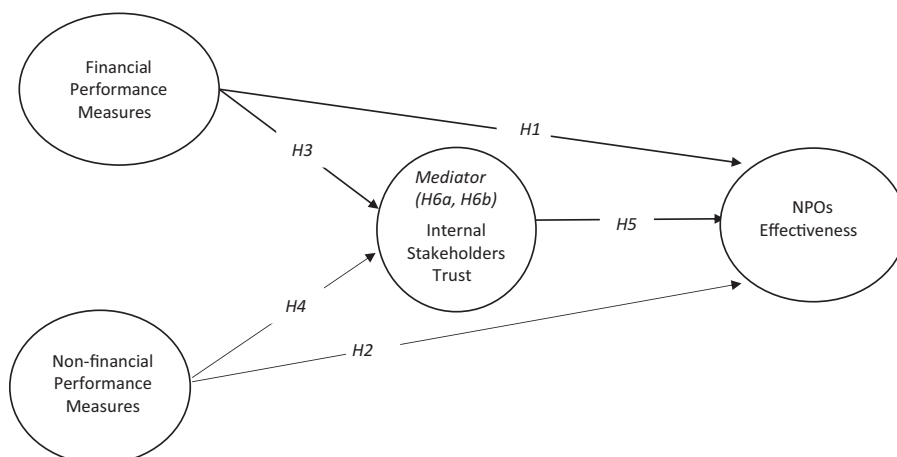
Managing through  
Measuring

Internal Stakeholders  
Attitude: Organizational  
Trust

Organizational Effectiveness: A  
Measure of NPOs' success

---

Performance  
measurement  
and NPOs'  
effectiveness



---

**Figure 1.**  
Hypothesized model

---

are performing (Brown, 2005; Zollo *et al.*, 2019), this study utilizes an individual perspective to provide an evidence of how internal stakeholders' perceptions of NPOs' PM significantly impact their levels of trust toward the NPO, thus resulting in higher perceptions of NPOs' effectiveness. Although our research spots a gap in the NPO literature, it follows a "box-breaking" research approach (Alvesson and Sandberg, 2011), which challenges the present specialized "boxed-in" mainstream literature in NPOs that ignores the individual perspective in PM research.

### Stakeholder theory: relevance to NPOs

In general, the focus of the stakeholder theory is on the notion of stakeholders (Barrane *et al.*, 2020). Stakeholders have been defined by Freeman (2010, p. 46) as "any group or individual who can affect or is affected by the achievement of the organization's objectives." Although different researchers build their work on stakeholders' perspectives as a mechanism for understanding organizational management in different sectors, the implications of the stakeholder's perspective remain limited within the NPO research. This theory is relevant to NPOs because the effective functioning of these organizations is affected by the manner in which stakeholder relationships are managed (Wellens and Jegers, 2014). This implies that the likelihood of NPOs being perceived as more effective increases when the NPOs better manage the prospects of stakeholders toward the governance of their NPOs.

While stakeholders demand accountability in the way NPOs try to achieve their missions, it has been argued that the best way to demonstrate accountability to diverse stakeholders is to measure performance through clearly identified measures (Alexander *et al.*, 2010; Mitchell, 2014). Therefore, we argue that stakeholders' experiences with their NPOs are considered the lenses through which they evaluate PM practices in these organizations, thus shaping the degree to which they trust their NPOs (Sarstedt and Schloderer, 2010; Willems *et al.*, 2016) and, consequently, perceive them as being more effective (Packard, 2010).

---

*Performance measurement in NPOs: a closer look*

In general, there is no consensus among NPO researchers on the most relevant performance measures that should be used to evaluate NPOs' performance (Gamble *et al.*, 2019). The argument about how to measure NPOs' performance is still under debate in operations research (Franco-Santos *et al.*, 2007) in general and more specifically in NPO research (Carman, 2010; Glassman and Spahn, 2012; Lecy *et al.*, 2012; Moura *et al.*, 2019; Packard, 2010; Sowa *et al.*, 2004; Word and Sowa, 2017). There are different reasons for these conflicting views among scholars pertaining to PM in this sector. For instance, Clarkson *et al.* (2010) found that PM systems and indicators differ from one context to another. Others such as Amirkhanyan (2010) reported that NPOs that provide services on behalf of government agencies are more likely to be evaluated based on qualitative indicators that are mainly concerned with the public image of NPOs and their ability to comply with the legislation. In addition, the complex nature of measuring NPOs can be attributed to the social mission and the legal statutes of these organizations (McHatton *et al.*, 2011). Keating and Frumkin (2003) added that the nature of the social values embedded in the mission of NPOs makes it very difficult to determine easily quantifiable performance measures to assess NPOs' performance.

In general, previous research on PM in this sector has focused on two main aspects. The first internal aspect concerns the overall financial health of NPOs (Argyris, 2009), such as fundraising efficiency (Aldrich, 2009), revenue growth and fiscal performance (Boateng *et al.*, 2016; Ritchie and Kolodinsky, 2003), resources diversification (Boateng *et al.*, 2016) and resources efficiency (Barman, 2007). It is very necessary to view NPOs as program- and project-based organizations (Aboramadan and Borgonovi, 2016), which implies the performance of their projects and services in terms of efficiency and effectiveness should be evaluated together with their financial health (Kareithi and Lund, 2012). This leads us to the second external aspect of performance measures, which concern the relationship between NPOs and the environment. Those measures include the ability to satisfy multiple stakeholders, such as clients and donors (Campbell and Slack, 2006; Moore, 2000), the public value of the services provided by NPOs to the beneficiaries (Lampkin *et al.*, 2007), networking (Bagnoli and Megali, 2011) and non-financial efficiency represented by the number of persons served (Barman, 2007; Boateng *et al.*, 2016; Kendall and Knapp, 2000). In addition to these measures, quality of the services provided has been suggested to be an important performance measure in the work of NPOs (Boateng *et al.*, 2016). On the other hand, Packard (2010) suggested that clients' and employees' satisfaction, outcomes and output accomplishments, NPOs' ability to adapt to changes and adequate funding are the most beneficial performance measures in this sector.

Others (see, for example, Epstein and Buhovac, 2009; Poister *et al.*, 2014; Tom and Frentzel, 2005) developed program-based frameworks to measure the performance of NPOs. Their frameworks highlighted the measures from the angle of program performance, including examining effectiveness, efficiency (inputs–outputs), activities and the overall impact. On the contrary, Kendall and Knapp (2000) developed a multidimensional framework known as the “Adapted Production Welfare Framework,” which mainly highlights four performance indicators, namely, efficiency, effectiveness, equity and financial performance, and Kaplan (2001) proposed the “Adapted Balanced Scorecard for NPOs.” Following the approach of Kednall and Knapp (2000), Aboramadan (2019) utilized diverse financial performance and non-financial performance measures while assessing the performance of Saudi nonprofits.

*NPOs' effectiveness*

For decades, the concepts of organizational effectiveness and organizational success have received great attention from scholars and researchers (Lecy *et al.*, 2012; Willems *et al.*, 2016).

Nevertheless, there is no common agreement among scholars on how to define and operationalize organizational effectiveness (Bryan, 2018). In NPO research, in particular, scholars have failed to provide a satisfactory definition of what constitutes this construct (Lecy *et al.*, 2012) and the appropriateness of the selection of most of the cases utilizing one measure or dimension, such as financial performance or productivity. In general, organizational effectiveness has been defined as a measure of how well an organization is performing (Jackson and Holland, 1998), or the managerial attempt to perform well to gain competitive advantage (Simons and Merchant, 1986). Despite the lack of consensus on what really defines organizational effectiveness, several authors endeavored to operationalize this construct (Sowa *et al.*, 2004). Beamon and Balcik (2008), for instance, viewed organizational effectiveness as the extent to which the clients' needs are being met. Benjamin and Misra (2006) defined organizational effectiveness as the NPO's ability to achieve its social mission and accomplish its predefined goals and objectives.

Approaches to measuring organizational effectiveness have been recapitulated into four approaches, namely, "goal attainment, systems resource approach, reputational approach and multidimensional approach" (Lecy *et al.*, 2012). The goal attainment perspective suggests that organizational effectiveness can be measured by assessing progress toward accomplishing the desired goals. This perspective received criticism, as NPOs lack clear and specific objectives. The second perspective, system resources, addressed the concept of organizational survival, which concerns the ability of NPOs to obtain the limited resources necessary to accomplish objectives (Ritchie and Kolodinsky, 2003). This approach was also criticized due to its overemphasis on financial measures. Moving to the reputational perspective, this perspective is based on the subjective evaluation of perceptions to assess organizational effectiveness (Herman and Renz, 2004). This approach might introduce bias and lack of consensus among the stakeholders in their evaluations of organizational effectiveness. Finally, the multidimensional perspective of NPOs' effectiveness, which was proposed by Lecy *et al.* (2012), focuses on four domains, namely, organizational management, partnership and networking, programs design and implementation and responsiveness to the environment. Although the multidimensional approach provides a detailed breakdown of how to measure NPOs' effectiveness, the research suggests that such a framework is difficult to practice and implement in NPOs because of lack of resources, complexity and unfamiliarity with such frameworks (Carman, 2007; LeRoux and Wright, 2010).

### **The relationship between PM and NPO effectiveness**

Although several previous studies demonstrated the important role PM plays in several sectors, such as the private sector (Bourne *et al.*, 2005; Dey and Cheffi, 2013) and public sector (Lega *et al.*, 2013; Tapinos *et al.*, 2005), research in this domain remains limited in the NPO sector (Bititci *et al.*, 2012; Micheli and Kennerley, 2005). The extant literature on NPOs reveals the positive impact of PM on NPOs' effectiveness in terms of better financial performance, goals achievement, decision-making quality and goals clarity (Berman and Wang, 2000; Carnochan *et al.*, 2014; Henderson *et al.*, 2002; LeRoux and Wright, 2010). With all these studies on the links between PM and NPOs' effectiveness, the remaining question is to what extent does the PM system represent a process of controlling through the use of measures (Franco and Bourne, 2003), and are these measures representative? Hence, in the PM framework, both financial and non-financial measures should be reflected (Aboramadan, 2018; Kaplan and Norton, 1996).

In this research, we argue that the use of financial and non-financial measures in PM positively contributes to NPOs' effectiveness. Theoretically speaking, the link between performance measures and NPOs' effectiveness can be explained by the presence of the stakeholder theory (Freeman, 2010), which provides an effective and practical way to manage

---

organizations operating in complex environments (Freeman *et al.*, 2007) such as those of NPOs. Two possible reasons can be associated with why stakeholder theory could serve as a framework for explaining the links between the use of PM and organizational effectiveness. First, performance measures are often influenced by the presence and involvement of the stakeholders of the organization (Montanari *et al.*, 1990). Second, the stakeholder theory is significant from a managerial standpoint, as leaders have the tendency to highlight the things that could lead to better performance in light of what is being measured (Kaplan and Norton, 1996; Sachs and Rühli, 2011).

On the other hand, the use of performance measures would enable managers to utilize the information produced by such a process to make effective decision (Moynihan, 2005), which, in turn, enhances the overall effectiveness of the organization. Furthermore, generating performance data through utilizing performance measures would enable managers and leaders alike to allocate resources in an efficient manner, which eventually contributes positively to overall performance (Kim *et al.*, 2019; Word and Sowa, 2017). Obtaining performance information would help leaders to evaluate the present performance and to make decisions on the improvement of existing management systems to ensure greater levels of effectiveness. In the same vein, when PM systems are designed in a way that provides a mechanism for leaders to keep control over the organization, funding and stakeholders, NPOs are more likely to achieve the desired results (Poister *et al.*, 2014). Finally, performance measures of efficiency, quality, customer satisfaction and outputs can be utilized by NPOs to manage their operation in an effective manner (Poister *et al.*, 2014). Hence, well-configured performance measures can enhance employees' attitudes and encourage them to work toward achieving the organizational objectives and to contributing to the overall effectiveness of NPOs. Moreover, the use of well-defined performance measures provides managers and administrators levels of control over the relationship between micro-level practices and results (Zuiderwijk and Janssen, 2014).

Given this discussion and to unlock the black box of PM vs. NPOs' effectiveness in the research, and following the previous suggestions that a blend of both financial and non-financial performance is the most appropriate way to measure performance, we posit the following two hypotheses:

*H1.* The use of financial measures is positively related to NPOs' effectiveness.

*H2.* The use of non-financial measures is positively related to NPOs' effectiveness.

### **The relationship between PM and internal stakeholders' trust**

In general, the concept of trust has received great attention from researchers, but there is still no commonly accepted definition of trust (Burke *et al.*, 2007; Lewicki *et al.*, 2006). The existing literature reports that the concept of trust can be examined from different angles. Trust within an organizational context can have different forms: trust in supervisors, trust in coworkers or trust in the organization (Schoorman *et al.*, 2007). Because in this study we are concerned with the level of trust of internal stakeholders in their NPOs, we will discuss the concept of organizational trust rather than trust at the individual level. Moreover, we consider here internal stakeholders' trust as a "collective psychological attitude concerning the trustworthiness of their NPOs."

On the relationship between PMs and internal stakeholders' trust in their NPOs, we argue that use of clear performance measures in NPOs provides a basis for integrity and transparency (Crucke and Decramer, 2016), which consequently will help to inspire confidence of internal stakeholders in NPOs, thus generating elevated levels of trust in them. This argument is supported by Palanski and Yammarino (2009), who mentioned that organization integrity is positively related to stakeholders' trust, and by Pavlou (2002), who

---

reported that transparency depicts a positive relationship with trust. In fact, the ambiguity represented by the absence of clear management practices (i.e. PM) would push stakeholders to consider the organization as insincere and, thus, perceive the organization as not trustworthy (Ben-Ner, 2002). These arguments are also embedded in the social exchange theory (Blau, 1964), which highlights the social exchanges between the organization and the employee. Applying this theory to the NPO context, we can argue that when internal stakeholders see their NPOs using clear approaches in measuring performance, this will generate a perception among stakeholders that these NPOs are transparent and sincere, which will generate a form of reciprocation represented by higher levels of stakeholders' trust in their NPOs. Given these above arguments we posit the following hypotheses:

*H3.* The use of financial measures is positively related to internal stakeholders' trust.

*H4.* The use of non-financial measures is positively related to internal stakeholders' trust.

### **The relationship between internal stakeholders' trust and organizational effectiveness**

In this section we predict that internal stakeholder trust has a positive impact on NPOs' effectiveness. First, trust has been often viewed as a key element to achieving organizational success (Davis *et al.*, 2000). By establishing a trustful relationship between the organization and its stakeholders, trust can be a key driver for competitive advantage (Barney and Hansen, 1994). For instance, trust can increase employees' satisfaction (Pirson and Malhotra, 2010) and facilitate operations efficiency (Nooteboom, 1996). Second, trust exerts positive effects on commitment, engagement, creative behaviors, information sharing, decision-making and innovation (Yasin Fadol and Sandhu, 2013; Nahapiet and Ghoshal, 1998; Osterloh and Frey, 2000; Politis, 2003), which would, in turn, enhance the overall performance of the organization. In line with the social exchange theory (Blau, 1964), employees who have trust in their organizations work harder and show greater levels of solving problems in an effective manner (Tremblay *et al.*, 2010) and channel their energies toward achieving the desired results (Chia *et al.*, 2014). In contrast, those employees who have lower trust levels in their organizations are more likely to reduce their work effectiveness (Dirks and Ferrin, 2001) and engage in negative work-related behaviors (Bies and Tripp, 1996), which will ultimately obstruct achieving higher levels of organizational effectiveness. Finally, when positive attitudes among staff, such as commitment, motivation and trust, are encouraged by an organization, this yields excellent results in terms of accomplishing the desired outcomes (Packard, 2010). Based on this the above argument, we posit the following hypothesis:

*H5.* Internal stakeholder trust is positively related to NPOs' effectiveness.

### **The mediating role of internal stakeholders' trust**

Internal stakeholders provide the necessary human resources an NPO needs to achieve its mission, and they straightforwardly influence the success of the NPO, as they have interest in the outcomes and outputs (Dicke *et al.*, 2016). In this paper, we argue that internal stakeholders' trust in their NPOs can serve as an effective intervening mechanism between the use of performance measures and NPOs' effectiveness. The use of performance measures, which forms the basis of accountability and transparency, will be positively perceived by internal stakeholders who see their NPOs as genuine, which, in turn, will generate higher levels of trust of in their NPOs. Due to this quality of the social exchanges, employees with higher levels of trust in their organization, on the other hand, will exert more effort to contribute to NPOs' effectiveness. Finally, the social exchange theory (Blau, 1964) provides a strong theoretical foundation to understand the role of trust played in the examined

relationship in this study through highlighting the quality of the social exchanges between the NPOs and internal stakeholders.

Empirically, the study of [Chia et al. \(2014\)](#) found that trust in supervisors has an indirect effect in the relationship between the use of business performance measures and managerial performance in Singapore. Moreover, [Verburg et al. \(2017\)](#) found that organizational trust mediates the relationship between the control systems and performance outcomes. Based on that, we propose the following hypothesis:

- H6.* Internal stakeholders' trust mediates the relationship between a) the use of financial measures and NPOs' effectiveness and b) the use of non-financial measures and NPOs' effectiveness.

### *Research method*

In general, Palestinian NPOs play a significant role in socioeconomic development through delivering important social and economic services to the Palestinian community. Most of the Palestinian NPOs rely on international donations from major funders such as the European Union and the World Bank, in addition to funds provided by international organizations that work in partnership with these NPOs ([NDC, 2010](#)).

A list of active and large 90 local NPOs operating in Gaza Strip was provided by the Palestinian NGO network to the researcher. These NPOs in Gaza strip provide services to the targeted beneficiaries in areas such as education, women rights, health care, economic development and youth activities. The researcher contacted via phone these 90 NPOs to check their availability to participate in the study. Only 76 NPOs gave their permission to conduct the study. A self-administered questionnaire was then distributed to the employees working in these NPOs.

Out of 533 questionnaires distributed, 220 were received back, and 2 of these questionnaires were removed because they included missing information. The remaining 218 questionnaires were useable for statistical analysis, representing a response rate of 40.90%. Questionnaires were distributed and collected using the drop-off and pick-up technique to guarantee a strong response rate. All respondents were given two weeks to fill in the questionnaire. Using the technique of back translation method, the questionnaires were translated from English to Arabic.

In terms of gender, 69.7% of the respondents were males and 30.3% were females. Nearly one-third (29.8%) of the respondents were between 30 and less than 35 years old, 36.3% were between 35 and less than 40 years old and 33.9% were more than 40 years old. Concerning experience, 8.7% had experience of less than 3 years, 14.2% had between 3 and less than 5 years of experience, 11.9% had between 5 and less than 7 years of experience and 65.2% had more than 7 years of experience. The working positions of these respondents included administration, project management and coordination, fundraising and logistics.

### **Data analysis strategy**

Before analyzing the data for hypotheses verification, data normality analysis was run to determine whether the data were normally distributed or not. First, the results of a Shapiro–Wilk test indicated that the data are normally distributed with  $p$ -values higher than 0.05. Second, to check for multicollinearity, we have run the analysis of the variance inflation factor (VIF) in which all the VIF values ranged between 1.0 and 1.243. These values are less than the value of 3, as recommend by [Hair et al. \(2019\)](#). To check for the linearity, we ran a curve-estimation for all the relationships in our model and found that all relationships are sufficiently linear. Given the previous discussion, we can see that the assumptions of



---

normality, multicollinearity and linearity were met, and analysis can be conducted using multivariate SEM techniques that account for measurement errors (Hair *et al.*, 2019). The data were analyzed using SEMAMOS 22 which adopts covariance-based multivariate statistical techniques (Byrne, 2016). SEM AMOS runs confirmatory factor analysis using the maximum likelihood method as suggested by Anderson and Gerbing (1988). It has been recommended to use covariance-based analysis where possible as it provides the researcher more flexibility with relatively greater information and better analysis in terms of data fit to the model (Hair *et al.*, 2019). Finally, following the suggestions of Preacher and Hayes (2008), we have utilized the 5000 bootstrapping method to check for mediation.

### Measures

Instead of relying on existing performance measures and organizational effectiveness frameworks that focus on one aspect of performance, we have developed the measures through selecting the items from different articles representing performance measures and organizational effectiveness to follow the strategy of “in-house assumption” (Alvesson and Sandberg, 2011).

- (1) *Financial performance measures*: This scale was measured using three items adopted from Boateng *et al.* (2016). These items were revenue growth, fundraising expenses to income ratio and diversification of revenue sources. Using a 7-point scale, respondents were asked to assess the degree of adoption of these measures in their NPOs. The internal reliability was 0.773.
- (2) *Non-financial performance*: This scale was measured using nine items adopted from Boateng *et al.* (2016) and Packard (2010). Eight items were adopted from Boateng *et al.* (2016): “quality of product/service, beneficiary’s satisfaction, timeliness of service provision, community involvement, donor sustainability, competitors’ overall performance, output/number of persons served, and compliance to statement of recommended practices” One item was adopted from Packard (2010): employee satisfaction. Using a 7-point scale, respondents were asked to assess the level of adoption of these measures in their NPOs. As this scale was adopted from two sources, exploratory factor analysis (EFA) was conducted to check for construct validity (DeVellis, 2012). The results of EFA using the principal component method showed that the nine items had an item-total correlation higher than 0.30 and a SD greater than 0.40 (Churchill, 1979). Factor loadings and communalities were greater than 0.5 and 0.4, respectively (Costello and Osborne, 2005). The value of the Kaiser–Meyer–Olkin test was 0.944, and the Bartlett’s test of sphericity showed a significant chi-square value (1028.760,  $df = 36$ ,  $p = 0.000$ ). Finally, the internal reliability was 0.91.
- (3) *Internal stakeholders’ trust*: We have adapted four items developed by Mayer and Davis (1999) to assess the level of employees’ trust in their NPOs. Respondents were asked to assess this construct on a 7-point scale where 1 indicated “absolute disagreement” and 7 indicated “absolute agreement.” A sample item was “My organization has a strong sense of integrity.” The internal reliability was 0.83.
- (4) *NPOs’ effectiveness*: As there is no consensus among NPO researchers on how to operationalize organizational effectiveness in NPOs, we have measured this scale using six items: four items were included from Langer and LeRoux (2017), and two items were developed from the multidimensional model of Lecy *et al.* (2012). Respondents were asked to assess how effective their NPOs are on the following items using a 7-point scale: “influencing policy or government decisions (local, state,

---

or national) that pertained to the mission, raising public awareness of their organization's cause, achieving the mission statement, increasing the organization's funding" (Langer and LeRoux, 2017), achieving strategic goals through networks and partnerships and the effectiveness of core management activities and functions such as HR, leadership, teams and board (Lecy *et al.*, 2012). Like the construct of non-financial performance measures, we have run EFA to check for its construct reliability. Using the principal component method, the results were as follows: item-total correlation higher than 0.30, SD greater than 0.40, communalities higher than 0.4, factor loadings higher than 0.5, the Kaiser–Meyer–Olkin test = 0.897 and the Bartlett's test of sphericity showed a significant chi-square value (630.699,  $df = 15$ ,  $p = 0.000$ ). Finally, the internal reliability was 0.89.

- (5) *Control variables*: Given the nature of this research, we have controlled for age, gender and professional experience of the respondents.

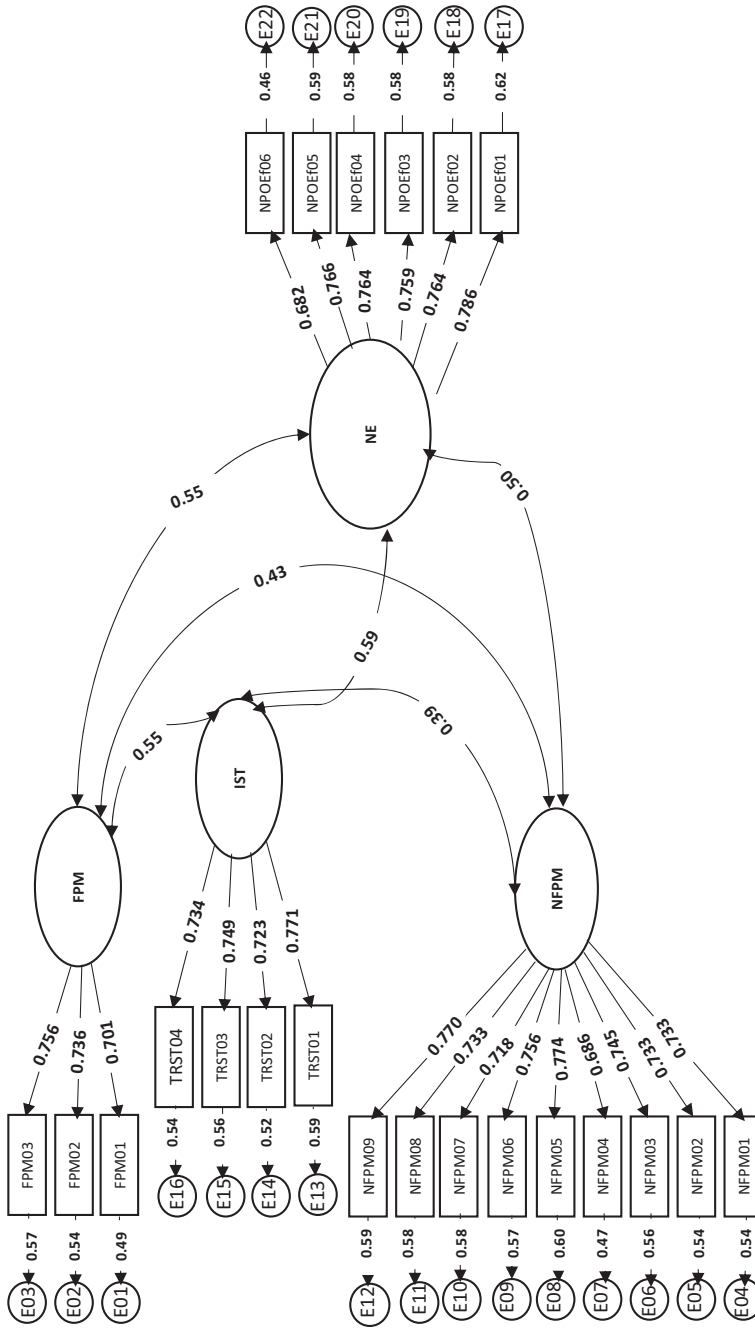
#### *Non-response bias*

In this research, we have relied on several techniques before and after data collection in order to minimize the non-response bias. First, following the recommendations of Churchill and Iacobucci (2002), respondents were encouraged to participate in the study through making the questionnaire more participant-friendly, reducing its length, minimizing the refusal rate through follow-up and proving a letter to the participants explaining the objectives of the study and that their personal information will be kept confidential. Finally, participants were promised to get descriptive analysis of the study as an incentive for their participation. Second, following the guidelines of Armstrong and Overton (1977), participants were categorized into two groups as late and early respondents. Following that, independent sample *t*-test was performed on these two groups regarding their demographics (gender, experience and working position) in which the results showed that there were no significant differences between these two groups at a significance level of 0.05. Therefore, we provide a conclusion to high degree of confidence that our data were not influenced by the non-response bias.

#### *Common method bias remedies and confirmatory factor analysis*

Two statistical techniques were used to ensure that the data are free of common method bias (CMB). First, Harman's single factor test showed that a single factor had a variance of 37.39%, which is below the value of 0.50 that is suggested by (Podsakoff *et al.*, 2003). Second, the common latent factor method was used to check the differences between the standardized regression weights from the model with the common factor and the standardized regression weights of the model without the common factor. The results show that all research variables yielded only 2.7% of the common factor, which is significantly below the 25.0% threshold that is suggested by Podsakoff *et al.* (2003). Second, the unmeasured latent method factor was created as another tool to check for common method variance. All questionnaire items were loaded on this factor and their congruent variables, with the correlation set to zero between the new factor and the research variables (Podsakoff *et al.*, 2003). The sum of the differences between the standardized loadings in the hypothesis model and the unmeasured latent method factor counted for 2.7% which is below the cut-off point of 25% suggested by Podsakoff *et al.* (2003). Therefore, we conclude that our data were not contaminated by CMB.

Following the method of maximum likelihood used by Anderson and Gerbing (1988), we run a confirmatory factor analysis. The results presented in Figure 2 showed that all items had significant standardized loadings ranging from 0.682 to 0.786. All items were retained in the model without deleting any items. The fit indices of the confirmatory



**Note(s):** FPM = Financial Performance Measures; NFPM = Non-Financial Performance Measures; IST = Internal Stakeholders' Trust; NE = NPOs' Effectiveness

**Figure 2.** Measurement model and standardized loading

factor analysis demonstrated an acceptable fit to the data of the hypothesized model ( $\chi^2 = 276.696$ ,  $df = 203$ ,  $\chi^2/DF = 1.36$ ,  $p < 0.001$ ; CFI = 0.969; TLI = 0.964; SRMR = 0.031; and RMSEA = 0.041).

The average variance extracted (AVE) values for financial measures, non-financial measures, internal stakeholders' trust and NPOs' effectiveness were 0.535, 0.546, 0.537 and 0.546, respectively, as shown in Table 1. The values of composite reliability (CR) for financial measures, non-financial measures, internal stakeholders' trust and NPOs' effectiveness were 0.775, 0.915, 0.823 and 0.878, respectively. The results are in line with Fornell and Larcker (1981) who suggested that the acceptable values of CR are above 0.7 and those for AVE are above 0.5. This indicates that the condition of convergent validity is met. On the other hand, discriminant validity was checked using the Fornell and Larcker (1981) criterion comparing the square root of AVE to correlations with the research variables. The results suggest, as presented in Table 2, that the square root of the AVE was higher than the correlations between the variables, suggesting the presence of discriminant validity.

### Analysis

In Table 2, we present the means, standard deviations and correlations among the examined variables in the study. Positive correlations were found between the financial measures and

Constructs	Scale items	T-value	AVE	CR
Financial measures	F1. "Revenue growth"	F	0.535	0.775
	F2. "Fundraising expenses to income"	8.778***		
	F3. "Diversification of revenue sources"	8.579***		
Non-financial performance	N1. "Quality of product/service"	F	0.546	0.915
	N2. "Beneficiary's satisfaction"	10.539***		
	N3. "Timeliness of service provision"	10.733***		
	N4. "Community involvement"	9.895***		
	N5. "Donor sustainability"	11.211***		
	N6. "Competitors' overall performance"	11.092***		
	N7. "Output/number of persons served"	10.36***		
	N8. "Compliance to statement of recommended practices SORP"	10.64***		
	N9. "Employee satisfaction"	11.341***		
Internal stakeholders trust	T1. "My organization has a strong sense of integrity"	F	0.537	0.823
	T2. "My organization tries hard to be transparent in dealings with stakeholders"	10.153***		
	T3. "Sound principles seem to guide my organization behavior"	10.471***		
	T4. "I like my organization values"	10.268***		
NPOs' effectiveness	E1. "Influencing policy or government decisions (local, state, or national) that pertained to mission"	F	0.546	0.878
	E2. "Raising public awareness of the organization's cause"	11.773***		
	E3. "Achieving the Mission Statement"	11.649***		
	E4. "Increasing the organization funding"	11.816***		
	E5. "Core Management activities and function (HR, Leadership, Teams, board)"	11.74***		
	E6. "Achieving strategic goals through networks and partnerships"	10.271***		

**Table 1.**  
Items T, CRs  
and AVEs

Note(s): F= Fixed \*\*\* significant at 0.001 level

	Mean	SD	1	2	3	4	5	6	7	Performance measurement and NPOs' effectiveness
Gender	1.30	0.46	1							
Age	3.04	0.79	-0.560**	1						
Experience	3.33	1.02	-0.493**	0.748**	1					
Financial measures	3.64	0.87	-0.100	0.057	0.008	(0.731)				
Non-financial measures	4.18	0.87	0.038	-0.056	-0.122	0.363**	(0.739)			
Internal stakeholders trust	4.03	0.99	0.000	0.045	-0.096	0.442**	0.338**	(0.733)		
NPOs effectiveness	4.08	0.86	-0.110	0.139*	0.056	0.446**	0.449**	0.504**	(0.739)	

**Note(s):** \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed)  $N = 218$

**Table 2.** Means, SDs correlations and (square root of AVE)

NPOs' effectiveness, non-financial measures and NPOs' effectiveness, internal stakeholders' trust and NPOs' effectiveness

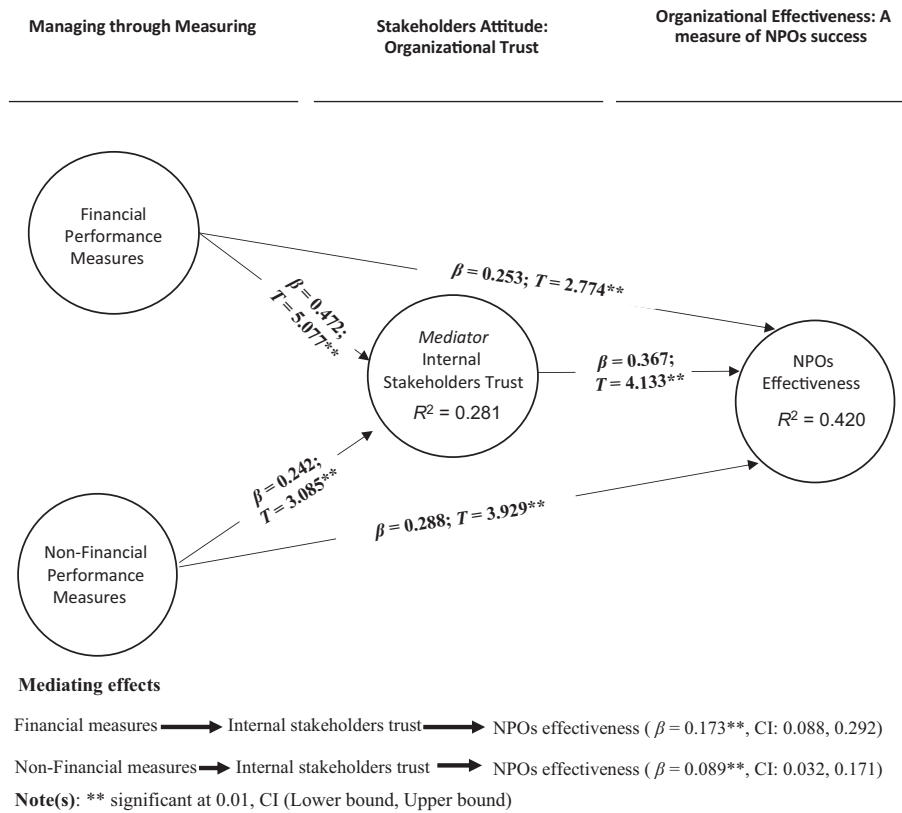
### Hypotheses testing

To test the proposed hypotheses, the analysis used a partial structural equation model, as presented in Figure 3. The findings of the model suggest that the data fit with the model, as the fit indices were satisfactory ( $\chi^2 = 307.61$ ,  $df = 204$ ,  $\chi^2/DF = 1.508$   $p < 0.001$ ; CFI = 0.956; TLI = 0.950; SRMR = 0.08; and RMSEA = 0.048). In terms of the direct effects, the results show that the use of financial performance measures was positively related to NPOs' effectiveness ( $\beta = 0.253$ ,  $p = 0.006$ ), which lends support to H1. Moreover, the use of non-financial performance measures was found to positively affect NPOs' effectiveness ( $\beta = 0.288$ ,  $p = 0.000$ ), supporting H2. On the relationship between the use of performance measures and internal stakeholders' trust, the results indicated that the use of both financial performance measures ( $\beta = 0.472$ ,  $p = 0.000$ ) and non-financial performance measures ( $\beta = 0.242$ ,  $p = 0.002$ ) was positively associated with international stakeholders' trust. These results lend support to H3 and H4. On another note, internal stakeholders' trust was found to exert a significant positive effect on NPOs' effectiveness ( $\beta = 0.367$ ,  $p = 0.000$ ), which supports H5.

On the mediating effects of internal stakeholders' trust, the results revealed that internal stakeholders' trust played a significant mediating effect in the relationship between the use of financial performance measures and NPOs' effectiveness ( $\beta = 0.173$ ,  $p = 0.000$ ) and the use of non-financial performance measures and NPOs' effectiveness ( $\beta = 0.089$ ,  $p = 0.000$ ). These results lend support to hypotheses H6a and H6b. Finally, among the control variables, only age was found to have a significant effect on internal stakeholders' trust ( $\beta = 0.253$ ,  $p = 0.02$ ).

### Discussion and implications

This paper aimed to investigate the links between performance measures and NPOs' effectiveness via the mediating effect of internal stakeholders' trust. On the relationship between financial performance measures and NPOs' effectiveness, the results suggest that financial performance measures depict a positive relationship with NPOs' effectiveness. Similarly, the results suggested that non-financial performance measures were positively related to NPOs' effectiveness. These results were in line with what has been documented in



**Figure 3.** Structural equation model

previous studies (e.g. Davis and Albright, 2004; Iwu *et al.*, 2015; Upadhaya *et al.*, 2014) of the private sector, which found that the use of both financial and non-financial measures exerts a significant positive effect on organizational effectiveness. This implies that the use of performance measures would give managers the opportunity to efficiently allocate resources, thus positively contributing to overall performance of an organization (Word and Sowa, 2017).

On the relationship between performance measures and internal stakeholders' trust, the results suggested that both financial and non-financial performance measures are positively associated with internal stakeholders' trust. This indicates that the use of clear performance measures represents practices of integrity and accountability, which, in turn, contribute to increased stakeholders' trust and confidence in their NPOs.

Considering the relationship between internal stakeholders' trust and NPOs' effectiveness, the results illustrated that internal stakeholders' trust positively influenced NPOs' effectiveness. This implies that when an NPO, through practices of integrity and transparency, encourages positive work-related attitudes (e.g. trust) among internal stakeholders, this will lead to higher levels of effectiveness in terms of achieving the desired results (Packard, 2010).

Finally, the results showed that the mediating effect of internal stakeholders' trust in the PM-NPOs' effectiveness relationship was significant. The results lend support to what has

been discussed under the umbrella of stakeholder theory, which suggests that the experiences of stakeholders with their NPOs' PM practices define the level of stakeholders' trust toward their NPOs and, ultimately, yields positive results for NPOs' effectiveness. Based on this, both practical and theoretical implications can be derived from the idea of using measures to manage performance in order to provide better support for achieving the desired outcome of organizational effectiveness, considering the significant role of stakeholders' trust in their NPOs.

Practically, we suggest NPOs' managers to focus on building their internal stakeholders' trust as an asset. On the other hand, NPOs' managers are required to take steps to develop and use their clearly identifiable performance measures, which, in turn, enhance the overall effectiveness of the organization in terms of mission achievement, raising public awareness, increasing funds and so forth. As internal stakeholders' trust was found to play a role in enhancing NPO effectiveness, we recommend NPOs' management to involve stakeholders in their decision-making process, as well as PM design and implementation. This could lead to strengthen stakeholders' positive work-related attitudes, such as trust, which ultimately enhances stakeholders' support for NPOs to achieve their desired results. Finally, NPOs should search for clearly identifiable performance measures that can capture their sophisticated achievements.

Theoretically, this paper aimed to respond to the gaps concerning the relationship between PM and NPOs' effectiveness. First, this research contributes to the literature on NPOs through investigating the role of internal stakeholders' trust toward their NPOs, a topic which has not been addressed by previous research. Second, this research generally contributes to the literature on PM in NPOs, as there is a lack of research in the area (Chenhall, 2006; Lynch-Cerullo and Cooney, 2011). Third, the research represents an empirical endeavor to investigate the black box of the PM–NPOs' effectiveness relationship; in a way, it provides an empirical evidence of the positive impact PM can exert on NPOs' effectiveness. Therefore, this study advances the literature on the relationship between PM and NPOs' effectiveness through empirical investigation rather than by offering conceptual or theoretical assumptions.

Fourth, this research contributes to the literature of PM in NPOs by investigating the aforementioned variables in developing countries. According to Wadongo and Abdel-Kader (2011), most of the empirical studies in the NPO sector were carried out in the USA and UK, with few exceptions from developing geographical zones. Fifth, while most of the performance management studies in NPOs are either systematic inquiry research (Lecy *et al.*, 2012) or case-study qualitative analysis (Yap and Ferreira, 2011), quantitative research designs using questionnaires are very limited (LeRoux and Wright, 2010).

### **Study limitations and future research**

Although this study contributes to the literature pertaining to the relationship between PM and NPOs' effectiveness, we still have some limitations that can open doors for future research. First, the nature of the study is cross-sectional, which did not allow us to examine causal relationships. Therefore, future studies may consider using longitudinal study designs to examine the changes in the variables over time. Second, the study focused only on Palestinian NPOs working in Gaza Strip, which might threaten the generalizability of the results to other NPOs working in other Palestinian zones such as the West Bank. Hence, future research might consider examining the study variables with a sample composed of Palestinian NPOs in both geographical zones and including non-Palestinian NPOs. Third, this research employed only internal stakeholder trust as a mediating variable in the relationship between performance measures and NPOs' performance. Future research might consider examining the role of external stakeholder trust (e.g. donors, governments,

beneficiaries), and other attitudinal outcomes such as work engagement which showed to be influenced by PM effectiveness in business settings (Kakkar *et al.*, 2020). Future work may consider social networking (Asamoah *et al.*, 2020), and big data and predictive analytics (Jeble *et al.*, 2019) as intervening mechanisms in the relationship between PM and NPOs' effectiveness. Finally, it is recommended that future research uses mixed-methods designs to provide better explanations of the relationship between performance measures and NPOs' effectiveness.

### ORCID iDs

Mohammed Aboramadan  <https://orcid.org/0000-0002-3826-0559>

Khalid Abed Dahleez  <http://orcid.org/0000-0002-1526-8750>

### References

- Aboramadan, M. (2018), "NGOs management: a roadmap to effective practices", *Journal of Global Responsibility*, Emerald Publishing, Vol. 9 No. 4, pp. 372-387.
- Aboramadan, M. (2019), "Strategic management: the case of Saudi nonprofits", *Journal for Global Business Advancement*, Vol. 12 No. 6, pp. 791-818.
- Aboramadan, M. and Borgonovi, E. (2016), "Strategic management practices as a key determinant of superior non-governmental organizations performance", *Problems of Management in the 21st Century*, Vol. 11 No. 2, pp. 71-92.
- Aldrich, T. (2009), "Benchmarking the fundraising performance of UK charities", *International Journal of Nonprofit and Voluntary Sector Marketing*, John Wiley & Sons, Vol. 14 No. 4, pp. 353-364.
- Alexander, J., Brudney, J.L. and Yang, K. (2010), "Introduction to the symposium: accountability and performance measurement: the evolving role of nonprofits in the Hollow state", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 39 No. 4, pp. 565-570.
- Alvesson, M. and Sandberg, J. (2011), "Generating research questions through problematization", *Academy of Management Review*, Vol. 36 No. 2, pp. 247-271.
- Amirkhanyan, A.A. (2010), "Monitoring across sectors: examining the effect of nonprofit and for-profit contractor ownership on performance monitoring in state and local contracts", *Public Administration Review*, John Wiley & Sons, Vol. 70 No. 5, pp. 742-755.
- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.
- Anderson, K. and McAdam, R. (2004), "A critique of benchmarking and performance measurement: lead or lag?", *Benchmarking: An International Journal*, Vol. 11 No. 5, pp. 465-483.
- Argyris, C. (2009), *Integrating the Individual and the Organization*, Taylor & Francis, New York.
- Armstrong, J.S. and Overton, T.S. (1977), "Estimating nonresponse bias in mail surveys", *Journal of Marketing Research*, Vol. 14 No. 3, pp. 396-402.
- Asamoah, D., Agyei-Owusu, B. and Ashun, E. (2020), "Social network relationship, supply chain resilience and customer-oriented performance of small and medium enterprises in a developing economy", *Benchmarking: An International Journal*, Vol. 27 No. 5, pp. 1793-1813.
- Bagnoli, L. and Megali, C. (2011), "Measuring performance in social enterprises", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 40 No. 1, pp. 149-165.
- Barman, E. (2007), "What is the bottom line for nonprofit organizations? A history of measurement in the British voluntary sector", *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol. 18 No. 2, pp. 101-115.
- Barney, J.B. and Hansen, M.H. (1994), "Trustworthiness as a source of competitive advantage", *Strategic Management Journal*, John Wiley & Sons, Vol. 15, pp. 175-190.



- 
- Barrane, F.Z., Ndubisi, N.O., Kamble, S., Karuranga, G.E. and Poulin, D. (2020), "Building trust in multi-stakeholder collaborations for new product development in the digital transformation era", *Benchmarking: An International Journal*, Vol. 28 No. 1, pp. 205-228, Emerald Group Publishing.
- Beamon, B.M. and Balcik, B. (2008), "Performance measurement in humanitarian relief chains", *International Journal of Public Sector Management*, Emerald Group Publishing, Vol. 21 No. 1, pp. 4-25.
- Ben-Ner, A. (2002), "The shifting boundaries of the mixed economy and the future of the nonprofit sector", *Annals of Public and Cooperative Economics*, John Wiley & Sons, Vol. 73 No. 1, pp. 5-40.
- Benjamin, L.M. and Misra, K. (2006), "Doing good work: implications of performance accountability for practice in the nonprofit sector", *International Journal of Rural Management*, SAGE Publications India, Vol. 2 No. 2, pp. 147-162.
- Berman, E. and Wang, X. (2000), "Performance measurement in US counties: capacity for reform", *Public Administration Review*, John Wiley & Sons, Vol. 60 No. 5, pp. 409-420.
- Bies, R.J. and Tripp, T.M. (1996), "Beyond distrust", *Trust in Organizations*, pp. 246-260.
- Bititci, U., Garengo, P., Dörfler, V. and Nudurupati, S. (2012), "Performance measurement: challenges for tomorrow", *International Journal of Management Reviews*, John Wiley & Sons, Vol. 14 No. 3, pp. 305-327.
- Blau, P.M. (1964), *Exchange and Power in Social Life*, 1st ed., Wiley, New York.
- Boateng, A., Akamavi, R.K. and Ndoro, G. (2016), "Measuring performance of non-profit organisations: evidence from large charities", *Business Ethics: A European Review*, John Wiley & Sons, Vol. 25 No. 1, pp. 59-74.
- Bourne, M., Kennerley, M. and Franco-Santos, M. (2005), "Managing through measures: a study of impact on performance", *Journal of Manufacturing Technology Management*, Emerald Group Publishing, Vol. 16 No. 4, pp. 373-395.
- Brown, W.A. (2005), "Exploring the association between board and organizational performance in nonprofit organizations", *Nonprofit Management and Leadership*, John Wiley & Sons, Vol. 15 No. 3, pp. 317-339.
- Bryan, T.K. (2018), "Toward a contingency model for the relationship between capacity and effectiveness in nonprofit organizations", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 48 No. 4, pp. 885-897.
- Burke, C.S., Sims, D.E., Lazzara, E.H. and Salas, E. (2007), "Trust in leadership: a multi-level review and integration", *The Leadership Quarterly*, Vol. 18 No. 6, pp. 606-632.
- Byrne, B.M. (2016), *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*, 3rd ed., RoutledgeTaylor & Francis Group, New York.
- Cairns, B., Harris, M., Hutchison, R. and Tricker, M. (2005), "Improving performance? The adoption and implementation of quality systems in UK nonprofits", *Nonprofit Management and Leadership*, John Wiley & Sons, Vol. 16 No. 2, pp. 135-151.
- Campbell, D.J. and Slack, R. (2006), "Public visibility as a determinant of the rate of corporate charitable donations", *Business Ethics: A European Review*, Wiley-Blackwell, Vol. 15 No. 1, pp. 19-28.
- Carlson, J., Kelley, A.S. and Smith, K. (2010), "Government performance reforms and nonprofit human services: 20 years in Oregon", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 39 No. 4, pp. 630-652.
- Carman, J.G. (2007), "Evaluation practice among community-based organizations: research into the reality", *American Journal of Evaluation*, SAGE Publications, Vol. 28 No. 1, pp. 60-75.
- Carman, J.G. (2010), "The accountability movement: what's wrong with this theory of change?", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 39 No. 2, pp. 256-274.

- 
- Carman, J.G. and Fredericks, K.A. (2008), "Nonprofits and evaluation: empirical evidence from the field", *New Directions for Evaluation*, John Wiley & Sons, No. 20081, pp. 51-71.
- Carnochan, S., Samples, M., Myers, M. and Austin, M.J. (2014), "Performance measurement challenges in nonprofit human service organizations", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 43 No. 6, pp. 1014-1032.
- Cestari, J.M.A.P., De Lima, E.P., Deschamps, F., Morton Van Aken, E., Treinta, F. and Moura, L.F. (2018), "A case study extension methodology for performance measurement diagnosis in nonprofit organizations", *International Journal of Production Economics*, Vol. 203 No. 1, pp. 225-238.
- Chenhall, R.H. (2006), "Theorizing contingencies in management control systems research", in Chapman, C.S., Hopwood, A.G. and Shields, M.D. (Eds), *Handbooks of Management Accounting Research*, Elsevier, Vol. 1, pp. 163-205.
- Chia, D.P., Lau, C. and Tan, S.L. (2014), "The relationships between performance measures and employee Outcomes: the mediating roles of procedural fairness and trust", *Performance Measurement and Management Control: Behavioral Implications and Human Actions*, Emerald Group Publishing, Vol. 28, pp. 203-232.
- Churchill, G.A. (1979), "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, SAGE Publications, Vol. 16 No. 1, pp. 64-73.
- Churchill, G. and Iacobucci, D. (2002), *Marketing Research: Methodological Foundations*, South-Western, London.
- Clarkson, P., Challis, D., Davies, S., Donnelly, M., Beech, R. and Hirano, T. (2010), "Comparing how to Compare: an evaluation of Alternative performance measurement systems in the field of social care", *Evaluation*, SAGE Publications, Vol. 16 No. 1, pp. 59-79.
- Cornforth, C. (2012), "Nonprofit governance research: limitations of the focus on boards and suggestions for new directions", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 41 No. 6, pp. 1116-1135.
- Costello, A.B. and Osborne, J.W. (2005), "Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis", *Practical Assessment, Research and Evaluation*, Vol. 10 No. 7, pp. 1-9.
- Crucke, S. and Decramer, A. (2016), "The development of a measurement instrument for the organizational performance of social enterprises", *Sustainability*, Vol. 8 No. 2, pp. 161-191, Multidisciplinary Digital Publishing Institute.
- Davis, S. and Albright, T. (2004), "An investigation of the effect of Balanced Scorecard implementation on financial performance", *Management Accounting Research*, Vol. 15 No. 2, pp. 135-153.
- Davis, J.H., Schoorman, F.D., Mayer, R.C. and Tan, H.H. (2000), "The trusted general manager and business unit performance: empirical evidence of a competitive advantage", *Strategic Management Journal*, John Wiley & Sons, Vol. 21 No. 5, pp. 563-576.
- DeVellis, R.F. (2012), *Scale Development: Theory and Applications*, 3rd ed., SAGE Publications, London.
- Dey, P.K. and Cheffi, W. (2013), "Green supply chain performance measurement using the analytic hierarchy process: a comparative analysis of manufacturing organisations", *Production Planning and Control*, Taylor & Francis, Vol. 24 Nos 8-9, pp. 702-720.
- Dicke, L.A., Heffner, A. and Ratliff, P. (2016), "Stakeholder perspective in nonprofit organizations", in Farazmand, A. (Ed.), *Global Encyclopedia of Public Administration, Public Policy, and Governance*, Springer International Publishing, Cham, pp. 1-8.
- Dirks, K.T. and Ferrin, D.L. (2001), "The role of trust in organizational settings", *Organization Science/INFORMS*, Vol. 12 No. 4, pp. 450-467.
- Epstein, M.J. and Buhovac, A.R. (2009), *Improving Performance Measurement: Not-For-Profit Organizations*, Mississauga Executive Centre, Mississauga.

- 
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Franco, M. and Bourne, M. (2003), "Factors that play a role in 'managing through measures'", *Management Decision*, Vol. 41 No. 8, pp. 698-710.
- Franco-Santos, M., Kennerley, M., Micheli, P., Martinez, V., Mason, S., Marr, B., Gray, D. and Neely, A. (2007), "Towards a definition of a business performance measurement system", *International Journal of Operations and Production Management*, Vol. 27 No. 8, pp. 784-801.
- Freeman, R.E. (2010), *Strategic Management: A Stakeholder Approach*, 1st ed., Cambridge university press, Cambridge.
- Freeman, R.E., Harrison, J.S. and Wicks, A.C. (2007), *Managing for Stakeholders: Survival, Reputation, and Success*, Yale University Press, London.
- Gamble, E., Thorsen, A. and Black, L. (2019), "Expanding strategic opportunities in nonprofits: mapping the interdependencies of critical performance variables", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 48 No. 3, pp. 616-632.
- Glassman, D.M. and Spahn, K. (2012), "Performance measurement for nonprofits", *The Journal of Applied Corporate Finance*, John Wiley & Sons, Vol. 24 No. 2, pp. 72-77.
- Gomes, C.F. and Yasin, M.M. (2011), "A systematic benchmarking perspective on performance management of global small to medium-sized organizations: an implementation-based approach", *Benchmarking: An International Journal*, Vol. 18 No. 4, pp. 543-562.
- Grossman, A. and Mccaffery, A. (2001), *Jumpstart*, Harvard Business School Publishing, Case, pp. 301-037.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2019), *Multivariate Data Analysis*, 8th ed., Cengage Learning EMEA, Hampshire.
- Henderson, D.A., Chase, B.W. and Woodson, B.M. (2002), "Performance measures for NPOs: how one organization developed a way to collect meaningful information", *Journal of Accountancy*, American Institute of CPA's, Vol. 193 No. 1, pp. 63-68.
- Herman, R.D. and Renz, D.O. (2004), "Doing things right: effectiveness in local nonprofit organizations, A Panel study", *Public Administration Review*, John Wiley & Sons, Vol. 64 No. 6, pp. 694-704.
- Iwu, C.G., Kapondoro, L., Twum-Darko, M. and Tengeh, R. (2015), "Determinants of sustainability and organisational effectiveness in non-profit organisations", *Sustainability, Multidisciplinary Digital Publishing Institute*, Vol. 7 No. 7, pp. 9560-9573.
- Jackson, D.K. and Holland, T.P. (1998), "Measuring the effectiveness of nonprofit boards", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 27 No. 2, pp. 159-182.
- Jebble, S., Kumari, S., Venkatesh, V.G. and Singh, M. (2019), "Influence of big data and predictive analytics and social capital on performance of humanitarian supply chain: developing framework and future research directions", *Benchmarking: An International Journal*, Vol. 27 No. 2, pp. 606-633.
- Julnes, P.de L. and Holzer, M. (2001), "Promoting the utilization of performance measures in public organizations: an empirical study of factors affecting adoption and implementation", *Public Administration Review*, John Wiley & Sons, Vol. 61 No. 6, pp. 693-708.
- Kakkar, S., Dash, S., Vohra, N. and Saha, S. (2020), "Engaging employees through effective performance management: an empirical examination", *Benchmarking: An International Journal*, Vol. 27 No. 5, pp. 1843-1860.
- Kaplan, R.S. (2001), "Strategic performance measurement and management in nonprofit organizations", *Nonprofit Management and Leadership*, John Wiley & Sons, Vol. 11 No. 3, pp. 353-370.
- Kaplan, R.S. and Norton, D.P. (1996), "Using the balanced scorecard as a strategic management system", *Focusing Your Organization on Strategy - with the Balanced Score-Card*, Harvard Business School Publishing, pp. 37-48.

- 
- Kareithi, R.N.M. and Lund, C. (2012), "Review of NGO performance research published in academic journals between 1996 and 2008", *South African Journal of Science*, Academy of Science of South Africa, Vol. 108 Nos 11–12, pp. 36-44.
- Keating, E.K. and Frumkin, P. (2003), "Reengineering nonprofit financial accountability: toward a more reliable foundation for regulation", *Public Administration Review*, John Wiley & Sons, Vol. 63 No. 1, pp. 3-15.
- Kendall, J. and Knapp, M. (2000), "Measuring the performance of voluntary organizations", *Public Management: An International Journal of Research and Theory*, Routledge, Vol. 2 No. 1, pp. 105-132.
- Kim, M., Charles, C. and Pettijohn, S.L. (2019), "Challenges in the use of performance data in management: results of a national survey of human service nonprofit organizations", *Public Performance and Management Review*, Routledge, Vol. 42 No. 5, pp. 1085-1111.
- Lampkin, L.M., Winkler, M.K., Kerlin, J., Hatry, H.P., Natenshon, D., Saul, J., Melkers, J. and Seshadri, A. (2007), *Building a Common Outcome Framework to Measure Nonprofit Performance*, The Urban Institute, Washington, DC.
- Langer, J. and LeRoux, K. (2017), "Developmental culture and effectiveness in nonprofit organizations", *Public Performance and Management Review*, Routledge, Vol. 40 No. 3, pp. 457-479.
- Lecy, J.D., Schmitz, H.P. and Swedlund, H. (2012), "Non-governmental and not-for-profit organizational effectiveness: a modern synthesis", *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol. 23 No. 2, pp. 434-457.
- Lee, C. (2020), "Understanding the diverse Purposes of performance information use in nonprofits: an empirical study of factors influencing the use of performance measures", *Public Performance and Management Review*, Routledge, Vol. 43 No. 1, pp. 81-108.
- Lee, C. and Clerkin, R.M. (2017), "Exploring the use of outcome measures in human service nonprofits: combining agency, institutional, and organizational capacity perspectives", *Public Performance and Management Review*, Routledge, Vol. 40 No. 3, pp. 601-624.
- Lega, F., Marsilio, M. and Villa, S. (2013), "An evaluation framework for measuring supply chain performance in the public healthcare sector: evidence from the Italian NHS", *Production Planning and Control*, Taylor & Francis, Vol. 24 Nos 10–11, pp. 931-947.
- LeRoux, K. and Wright, N.S. (2010), "Does performance measurement improve strategic decision making? Findings from a national survey of nonprofit social service agencies", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 39 No. 4, pp. 571-587.
- Lewicki, R.J., Tomlinson, E.C. and Gillespie, N. (2006), "Models of interpersonal trust development: theoretical approaches, empirical evidence, and future directions", *Journal of Management*, SAGE Publications, Vol. 32 No. 6, pp. 991-1022.
- Liston, V. (2008), "NGOs and spatial dimensions of poverty in Kenya", *African Studies Association UK (ASAUK) Conference*, University of Central Lancashire, Preston.
- Lynch-Cerullo, K. and Cooney, K. (2011), "Moving from outputs to outcomes: a review of the evolution of performance measurement in the human service nonprofit sector", *Administration in Social Work*, Routledge, Vol. 35 No. 4, pp. 364-388.
- Martikke, S. (2008), *Commissioning: Possible Greater Manchester VCS Organisations Experiences in Public Sector Commissioning*, Greater Manchester Centre for Voluntary Organisation, Manchester.
- Mausolff, C. and Spence, J. (2008), "Performance measurement and program effectiveness: a structural equation modeling approach", *International Journal of Public Administration*, Routledge, Vol. 31 No. 6, pp. 595-615.
- Mayer, R.C. and Davis, J.H. (1999), "The effect of the performance appraisal system on trust for management: a field quasi-experiment", *Journal of Applied Psychology*, American Psychological Association, Vol. 84 No. 1, pp. 123-136.

- 
- McHatton, P.A., Bradshaw, W., Gallagher, P.A. and Reeves, R. (2011), "Results from a strategic planning process: benefits for a nonprofit organization", *Nonprofit Management and Leadership*, John Wiley & Sons, Vol. 22 No. 2, pp. 233-249.
- Micheli, P. and Kennerley, M. (2005), "Performance measurement frameworks in public and non-profit sectors", *Production Planning and Control*, Taylor & Francis, Vol. 16 No. 2, pp. 125-134.
- Mitchell, G.E. (2014), "Why will we ever learn? Measurement and evaluation in international development NGOs", *Public Performance and Management Review*, Routledge, Vol. 37 No. 4, pp. 605-631.
- Montanari, J.R., Morgan, C.P. and Bracker, J.S. (1990), *Strategic Management: A Choice Approach*, 1st ed., Dryden Press, Illinois.
- Moore, M.H. (2000), "Managing for value: organizational strategy in for-profit, nonprofit, and governmental organizations", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 29 No. 1, pp. 183-204.
- Moura, L.F., de Lima, E.P., Deschamps, F., Van Aken, E., da Costa, S.E.G., Treinta, F.T. and Cestari, J.M.A.P. (2019), "Designing performance measurement systems in nonprofit and public administration organizations", *International Journal of Productivity and Performance Management*, Emerald Publishing, Vol. 68 No. 8, pp. 1373-1410.
- Moynihan, D.P. (2005), "Goal-based learning and the future of performance management", *Public Administration Review*, John Wiley & Sons, Vol. 65 No. 2, pp. 203-216.
- Nahapiet, J. and Ghoshal, S. (1998), "Social capital, intellectual capital, and the organizational advantage", *Academy of Management Review*, Academy of Management, Vol. 23 No. 2, pp. 242-266.
- NDC (2010), *Palestinian Non Governmental Organizations (NGOs) and the Private Sector: Potentials for Cooperation and Partnerships*, Gaza, Palestine.
- Nooteboom, B. (1996), "Trust, opportunism and governance: a process and control model", *Organization Studies*, SAGE Publications, Vol. 17 No. 6, pp. 985-1010.
- Osterloh, M. and Frey, B.S. (2000), "Motivation, knowledge transfer, and organizational forms", *Organization Science*, INFORMS, Vol. 11 No. 5, pp. 538-550.
- Packard, T. (2010), "Staff perceptions of variables affecting performance in human service organizations", *Nonprofit and Voluntary Sector Quarterly*, SAGE Publications, Vol. 39 No. 6, pp. 971-990.
- Palanski, M.E. and Yammarino, F.J. (2009), "Integrity and leadership: a multi-level conceptual framework", *The Leadership Quarterly*, Vol. 20 No. 3, pp. 405-420.
- Pavlou, P.A. (2002), "Institution-based trust in interorganizational exchange relationships: the role of online B2B marketplaces on trust formation", *The Journal of Strategic Information Systems*, Vol. 11 No. 3, pp. 215-243.
- Pirson, M. and Malhotra, D. (2010), "Foundations of organizational trust: what matters to different stakeholders?", *Organization Science*, INFORMS, Vol. 22 No. 4, pp. 1087-1104.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Poister, T.H., Aristigueta, M.P. and Hall, J.L. (2014), *Measuring Performance in Public and Nonprofit Organizations*, 2nd ed., Jossey-Bass, California.
- Politis, J.D. (2003), "The connection between trust and knowledge management: what are its implications for team performance", *Journal of Knowledge Management*, Vol. 7 No. 5, pp. 55-66.
- Preacher, K.J. and Hayes, A.F. (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behavior Research Methods*, Vol. 40 No. 3, pp. 879-891.

- 
- Ritchie, W.J. and Kolodinsky, R.W. (2003), "Nonprofit organization financial performance measurement: an evaluation of new and existing financial performance measures", *Nonprofit Management and Leadership*, John Wiley & Sons, Vol. 13 No. 4, pp. 367-381.
- Sachs, S. and Rühl, E. (2011), *Stakeholders Matter: A New Paradigm for Strategy in Society*, 1st ed., Cambridge University Press, Cambridge.
- Sarstedt, M. and Schloderer, M.P. (2010), "Developing a measurement approach for reputation of nonprofit organizations", *International Journal of Nonprofit and Voluntary Sector Marketing*, John Wiley & Sons, Vol. 15 No. 3, pp. 276-299.
- Schoorman, F.D., Mayer, R.C. and Davis, J.H. (2007), "An integrative model of organizational trust: past, present, and future", *Academy of Management Review*, *Academy of Management*, Vol. 32 No. 2, pp. 344-354.
- Simons, R. and Merchant, K.A. (1986), "Research and control in complex organizations: an overview", *Journal of Accounting Literature*, Vol. 5 No. 1, pp. 183-203.
- Sowa, J.E., Selden, S.C. and Sandfort, J.R. (2004), "No longer unmeasurable? A multidimensional integrated model of nonprofit organizational effectiveness", *Nonprofit and Voluntary Sector Quarterly*, Vol. 33 No. 4, pp. 711-728.
- Tapinos, E., Dyson, R.G. and Meadows, M. (2005), "The impact of the performance measurement systems in setting the 'direction' in the University of Warwick", *Production Planning and Control*, Taylor & Francis, Vol. 16 No. 2, pp. 189-198.
- Teelken, C. (2008), "The intricate implementation of performance measurement systems: exploring developments in professional-service organizations in the Dutch non-profit sector", *International Review of Administrative Sciences*, SAGE Publications, Vol. 74 No. 4, pp. 615-635.
- Tom, B. and Frentzel, B. (2005), "Performance-based management builds support and funding", *Nonprofit World, Society for Nonprofit Organizations*, Michigan, Vol. 23 No. 6, pp. 28-29.
- Tremblay, M., Cloutier, J., Simard, G., Chênevert, D. and Vandenberghe, C. (2010), "The role of HRM practices, procedural justice, organizational support and trust in organizational commitment and in-role and extra-role performance", *International Journal of Human Resource Management*, Routledge, Vol. 21 No. 3, pp. 405-433.
- Upadhaya, B., Munir, R. and Blount, Y. (2014), "Association between performance measurement systems and organisational effectiveness", *International Journal of Operations and Production Management*, Emerald Group Publishing, Vol. 34 No. 7, pp. 853-875.
- Verburg, R.M., Nienaber, A.-M., Searle, R.H., Weibel, A., Den Hartog, D.N. and Rupp, D.E. (2017), "The role of organizational control systems in employees' organizational trust and performance outcomes", *Group and Organization Management*, SAGE Publications, Vol. 43 No. 2, pp. 179-206.
- Wadongo, B. and Abdel-Kader, M. (2011), in Abdel-Kader, M.G. (Ed.), *Performance Management in Non-profit Organizations BT - Review of Management Accounting Research*, Palgrave Macmillan UK, London, pp. 450-478.
- Wellens, L. and Jegers, M. (2014), "Effective governance in nonprofit organizations: a literature based multiple stakeholder approach", *European Management Journal*, Vol. 32 No. 2, pp. 223-243.
- Willems, J., Jegers, M. and Faulk, L. (2016), "Organizational effectiveness reputation in the nonprofit sector", *Public Performance and Management Review*, Routledge, Vol. 39 No. 2, pp. 454-475.
- Word, J.K.A. and Sowa, J.E. (2017), *The Nonprofit Human Resource Management Handbook: From Theory to Practice*, Taylor & Francis, New York.
- Yap, P. and Ferreira, A. (2011), "The complex and multifaceted world of performance management in NGOs: a case study", *2011 AFAANZ Conference*, Darwin, Australia, Accounting & Finance Association of Australia & New Zealand.

- Yasin, M.M. and Gomes, C.F. (2010), "Performance management in service operational settings: a selective literature examination", *Benchmarking: An International Journal*, Vol. 17 No. 2, pp. 214-231.
- Yasin Fadol, Y. and Sandhu, M.A. (2013), "The role of trust on the performance of strategic alliances in a cross-cultural context: a study of the UAE", *Benchmarking: An International Journal*, Vol. 20 No. 1, pp. 106-128.
- Young, D.R., Salamon, L.M. and Grinsfelder, M.C. (2012), "Commercialization, social ventures, and for-profit competition", in Salamon, L.M. (Ed.), *The State of Nonprofit America*, 2nd ed., Brookings Institution Press, Baltimore, pp. 521-548.
- Zollo, L., Laudano, M.C., Boccardi, A. and Ciappei, C. (2019), "From governance to organizational effectiveness: the role of organizational identity and volunteers' commitment", *Journal of Management and Governance*, Vol. 23 No. 1, pp. 111-137.
- Zuiderwijk, A. and Janssen, M. (2014), "Open data policies, their implementation and impact: a framework for comparison", *Government Information Quarterly*, Vol. 31 No. 1, pp. 17-29.

### Corresponding author

Mohammed Aboramadan can be contacted at: [mohammed.aboramadan@uninsubria.it](mailto:mohammed.aboramadan@uninsubria.it)

---

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgrouppublishing.com/licensing/reprints.htm](http://www.emeraldgrouppublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)