



Full length article

Unveiling barriers to sustainable public procurement in emerging economies: Evidence from a leading sustainable supply chain initiative in Latin America

Diego Delmonico^a, Charbel Jose Chiappetta Jabbour^{b,*}, Susana Carla Farias Pereira^c,
Ana Beatriz Lopes de Sousa Jabbour^b, Douglas William Scott Renwick^d,
Antônio Márcio Tavares Thomé^e

^a UNESP – The Sao Paulo State University, Production Engineering Department, Sao Paulo, Brazil

^b Montpellier Business School, Montpellier Research in Management, 2300 Avenue des Moulins, 34080 Montpellier Cedex 4, France

^c FGV – EAESP, Department of Production & Operations Management, Fundação Getúlio Vargas, São Paulo, Brazil

^d Nottingham Business School, Nottingham Trent University, Nottingham, UK

^e Industrial Engineering Department, Pontifical Catholic University of Rio de Janeiro, Rua Marquês de São Vicente, 225 sala: 952L - 22453-900, Rio de Janeiro, Brazil

ARTICLE INFO

Keywords:

Sustainable operations
Sustainable public procurement
Sustainable supply chain
Sustainable purchasing
Latin America

ABSTRACT

In light of the Theory of Ecological Modernisation, this is the first work to explore the organisational barriers affecting one of the most significant sustainable public procurement initiatives in Latin America: the Brazilian Environmental Agenda for Public Operations Management (the ‘A3P Programme’). This article explores the barriers to sustainable procurement in a Brazilian context, inspired by the work of Brammer and Walker (2011). Based on the results of a survey of programme managers, our first recommendation is to group the barriers to sustainable procurement into five categories: organisational culture, motivation, economic uncertainty, market, and operations. Amongst these, it was found that organisational culture stands out as a particular barrier to sustainable public procurement. This work also highlights Ecological Modernisation Theory as a useful tool for understanding why variables related to cost and budget are not barriers to implementing sustainable public procurement initiatives. Consequently, the main implication of this study is that government should consider cultural change management when developing sustainability management initiatives.

1. Introduction

Based on the principles of Ecological Modernisation Theory (Zhu et al., 2013) as applied to sustainable operations (Sarkis et al., 2011; Walker et al., 2014), the objective of this work is to understand the main barriers to sustainable public procurement in Brazil. The barriers to sustainable procurement in the public sector proposed by Brammer and Walker (2011) were explored in a Brazilian context and original results were obtained. Although this research is inspired by Brammer and Walker (2011), its exploratory approach also owes much to the work of Oliveira and Santos (2015). According to Oliveira and Santos (2015), Brazil’s sustainable public purchasing is less structured than in other countries, and has faced challenges on legal, operational and cultural grounds.

Sustainable procurement is considered a key practice of sustainable supply chains in emerging economies (Mathivathanan et al., 2018;

Mani et al., 2016; Kusi-Sarpong et al., 2015). The Brazilian public sector accounts for 15% of the country’s gross domestic product (GDP), through its acquisition of goods and services. This is equivalent to more than US \$100 billion (Ministry of Planning, Budget and Management, 2012) and follows the worldwide trend of significant national spending on public procurement. Brazil is amongst the world’s largest ten economies, and is a member of important international groups such as the BRICS group and Mercosur. Despite the country’s large economy, it has received little attention in studies addressing sustainability and issues related to the supply chain (e.g. Fahimnia et al., 2015). There are, for example, works on sustainable public procurement in countries such as China (Zhu et al., 2013), India (Agarchand and Laishram, 2017), Saudi Arabia (Islam et al., 2017), South Africa (Mashele and Chuchu, 2018) and Malaysia (Mcmurray et al., 2013). The existing research tends to examine particular—mostly developed—countries, such as the UK, Sweden, the USA and Germany (Brammer and Walker, 2011;

* Corresponding author.

E-mail addresses: diegodelmonico@fclar.unesp.br (D. Delmonico), c.chiappettajabbour@montpellier-bs.com (C.J.C. Jabbour), susana.pereira@fgv.br (S.C.F. Pereira), a.sousa-jabbour@montpellier.com.br (A.B.L. de Sousa Jabbour), douglas.renwick@ntu.ac.uk (D.W.S. Renwick), mt@puc-rio.br (A.M.T. Thomé).

<https://doi.org/10.1016/j.resconrec.2018.02.033>

Received 13 January 2018; Received in revised form 20 February 2018; Accepted 28 February 2018

Available online 14 March 2018

0921-3449/ © 2018 Published by Elsevier B.V.

Table 1
Sample of research articles in sustainable purchasing.

Research	Summary	Research Methodology (Literature Review, Qualitative or Quantitative)
Brammer and Walker (2011)	The authors reveal that sustainable procurement practices are evident in public sector procurement, but vary across regions. In addition, the authors highlight the main facilitators of and barriers to sustainable procurement.	Quantitative (Survey)
Dawson and Probert (2007)	The authors propose that public bodies can close the recycling loop by using sustainable procurement initiatives to facilitate the inclusion of green waste compost in contract specifications	Quantitative (Survey)
Ho et al. (2010)	With a focus on Asia, the authors show that government's involvement in green procurement is found to directly determine its overall effectiveness. They show that public leadership on green procurement has advanced green procurement in the private sector.	Qualitative (Case Study)
Mcmurray et al. (2013)	Based on a survey of Malaysian private and public managers, it was found that lack of awareness posed the most significant barrier to sustainable procurement implementation, regardless of organisation or sector.	Quantitative (Survey)
Miemczyk et al. (2012)	This paper provides a structured literature review of sustainability in purchasing and supply management.	Literature Review
Nijaki and Worrel (2012)	The authors show how local entities, such as cities and counties, can use environmentally preferable purchasing to boost the local green economy.	Qualitative (Case Study)

Roman, 2017; Palm and Backman, 2017), with a scarcity of studies in a Brazilian context. Additionally, the public sector has been re-shaped by contemporary developments in procurement, which require further analysis (Panayiotou et al., 2004).

As a consequence of new environmental laws and governance systems (Jabbour et al., 2014), Brazil has been working to steer the public sector towards sustainability. In recent decades there have been significant government efforts to expand sustainability initiatives, such as the development of the Environmental Agenda in Public Administration (A3P) programme. This is a Ministry of the Environment (MMA) programme whose objective is to encourage the adoption of environmental practices within public agencies, as well as gathering information on existing environmental practices. This is the largest public sector sustainable procurement programme in Latin America.

Despite the considerable increase in sustainable public procurement in Brazil in recent years, there are concerns that few public purchases made in the country (Oliveira and Santos, 2014) incorporate any sustainability criteria. For this reason, it is important to understand the barriers that may be preventing A3P from achieving the maximum success possible.

The study of barriers is appropriate in contexts where the adoption of transformative measures for solving important issues faces challenges (Luthra et al., 2016). The literature (Walker et al., 2012) indicates that studies on this subject in developing countries are extremely relevant because of the social impact they can generate.

In order to achieve the research objective, the following five steps were taken: (i) a review of the literature on barriers to sustainable procurement was conducted, in order to identify useful variables; (ii) these variables were then tested against the opinions of specialists as to their formal suitability and content, in order to design the research questionnaire; (iii) a preliminary survey of potentially suitable organisations was carried out; (iv) Survey Monkey was used to deliver the research instrument developed for collecting the data; (v) the data were analysed using correlation analysis and factor analysis with the help of IBM's SPSS software, which measured the relationships between the variables and categorised them into factor groups.

The main contributions of this research are: (i) a survey of the main barriers to sustainable public procurement in Brazil, filling a gap in the literature and presenting new perspectives on the subject; (ii) a survey of possible relationships between variables, with the potential to increase understanding of the phenomenon as well as providing a basis for theoretical studies; (iii) a categorisation of the barriers identified, enabling the visualisation of the structure of problems involving sustainable public procurement. This research is unique when compared with previous studies in sustainable purchasing (for example, Ramayah et al., 2010) and aims to address the demand for more research on

sustainability in the supply chains of emerging economies (Kusi-Sarpong and Sarkis, 2017). It also answers early calls for additional research in sustainable infrastructure (Thomé et al., 2016) and sustainable urban infrastructure development (Ferrer et al., 2018), which are largely led by public procurement in emerging economies.

The Theory of Ecological Modernisation was adopted as it has previously been used to explain government-led initiatives to push forward green management practices in emerging economies (Sarkis et al., 2011; Yee et al., 2013; Zhu et al., 2015). The methodological approach chosen—exploratory statistics—was deemed appropriate due to the lack of knowledge regarding the Brazilian Environmental Agenda for Public Operations Management (the 'A3P Programme').

Following this introduction, Section 2 presents the theoretical basis for sustainable public procurement. Section 3 discusses methodology, focusing on sample definition, data collection procedures and the research instrument. The fourth section presents the research results in the form of descriptive statistics, correlation analysis, factor analysis and the Kruskal-Wallis test. Section 5 analyses the results in the light of the literature on sustainable public procurement. The final section of the article considers the work's limitations.

2. Theoretical background

The fields of sustainable operations management (Dubey et al., 2017) and industrial sustainability (Smart et al., 2017; Dubey et al., 2016) have increasingly attracted the attention of researchers, and include topics such as sustainable supply chain management (Seuring and Müller, 2008; Gunasekaran and Irani, 2014), of which sustainable public procurement forms part. This concept is normally understood as the application of sustainable procurement to public sector purchasing processes (Oruezabala and Rico, 2012), and is defined by the search for sustainable development by way of the procurement process (Walker and Brammer, 2012). Sustainable procurement increases complexity along with the variety of issues that have influenced developments in contemporary procurement (Gunasekaran et al., 2009; Jin and Yu, 2015), particularly in the public procurement sphere (Panayiotou et al., 2004). An overview of some of the key studies on sustainable procurement, and the research methodology used in these, is presented in Table 1.

The discussion on sustainable public procurement began with an analysis of the relationships between the public and private sectors. As a consequence of this initial study, a number of investigations were conducted. Van Hoof and Lyon (2013) consider the government's use of the procurement process to encourage sustainable practices in private companies. Blay-Palmer et al. (2013), Preuss (2007, 2009), Preuss et al. 2011 discuss how local governments have used the procurement

Download English Version:

<https://daneshyari.com/en/article/7494141>

Download Persian Version:

<https://daneshyari.com/article/7494141>

[Daneshyari.com](https://daneshyari.com)