

Drivers and internalisation of the EFQM excellence model

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Abstract

Purpose – Although the European Foundation for Quality Management (EFQM) Excellence Model has been widely adopted throughout Europe, a thorough examination of the factors that contribute to the internalisation of the model (i.e. a substantive adoption) has been neglected in the literature. The purpose of this paper is to present a model that analyses the drivers of the real internalisation of the EFQM excellence model, with a focus on the role of motives for adoption, and appraisal and compensation systems.

Design/methodology/approach – An empirical study was carried out based on a sample of Spanish organisations that had been awarded EFQM recognition. Structural equation models, cluster analysis and ANOVA were used to examine the research questions.

Findings – Internal motives concerning the creation of a participative style are the main driver of internalisation. Moreover, having an appraisal system-oriented towards the development of employees helps the substantive adoption of the EFQM model. These findings reinforce the importance of the soft elements of the EFQM model.

Originality/value – This study enhances evidence about the motives for adoption and their influence on the internalisation of the EFQM model. It analyses internalisation in a novel context, EFQM recognised organisations, and contributes to the debate about the efficacy of the EFQM model to performance improvement, by unveiling the factors that could foster the internalisation of the model within the organisational routines.

Keywords Compensation, Appraisal, EFQM, Excellence, Internalization, Motives for adoption

Paper type Research paper

1. Introduction

Over the last few decades Business Excellence Models (BEMs) have emerged as overarching management frameworks aimed at assessing management practices and results, and guiding organisations in improving performance (Jayamaha *et al.*, 2009; Kim *et al.*, 2010; Mohammad *et al.*, 2011; Dahlgaard *et al.*, 2013; Escrig and de Menezes, 2015). BEMs allow organisations to improve by encouraging the introduction of best practices and tools for self-assessment, benchmarking and continuous improvement. In most cases, the existing BEMs have been supported by national or international bodies as a basis for awards such as the European Foundation for Quality Management (EFQM) Excellence Award (Dahlgaard *et al.*, 2013; Araújo and Sampaio, 2014).

To promote the adoption of the model, the EFQM launched a recognition scheme, through which organisations could be recognised by a way of an internal and external assessment based on the EFQM model criteria. Consequently, many organisations have been awarded an external recognition in accordance with the EFQM model, for which they



must have offered proof that they have adopted a comprehensive range of management practices embedded within the criteria of the constituting model. The widespread adoption of the model amongst practitioners has aroused the interest of scholars, who have conducted interesting academic studies that evidence the benefits derived from the adoption of the EFQM model (e.g. Boulter *et al.*, 2013).

However, drawing on institutional theory (DiMaggio and Powell, 1983), other scholars (e.g. Sharma *et al.*, 2010; Ford, 2011; Pipan *et al.*, 2012) warn that imitative behaviour seems to spread the use of the EFQM model, which would lead to a symbolic rather than substantive adoption (Escrig and de Menezes, 2015). This theory asserts that organisations function in a social context in which institutional pressures might build an isomorphic phenomenon by exerting strong influence and shaping companies' behaviour to obtain legitimacy. From this perspective, therefore, organisations may be externally encouraged to adopt the EFQM model and to participate in the recognition scheme in order to comply with accepted practices in the environment in order to gain such legitimacy. Hence, organisations tend to copy practices in a search for social support. As a result, obtaining a recognition could have a symbolic nature that may prevent organisations from integrating and internalising the good management practices embedded in the EFQM model strongly enough to reap the benefits that the use of the model could have for performance improvement. In contrast to this, and as theoretically supported by the resource-based view (RBV) (e.g. Peteraf, 1993), which holds that organisations build their competitive advantage from a series of resources and internal capabilities, organisations can also adopt the EFQM model with the aim of integrating its principles as resources to improve the processes and functioning of the organisation. That is, internal (also called functionalist) reasons (Nair and Prajogo, 2009) would be drivers of the EFQM model adoption, thereby fostering the quality culture of the organisation, which could enhance the internalisation of the EFQM guidelines.

In this context, although in the last decade the internalisation of management standards like ISO 9000 has been studied in the specialised literature (e.g. Nair and Prajogo, 2009; Tari *et al.*, 2013), little is known about what really allows the EFQM model to be internalised in the organisation (i.e. it is accepted by people as part of the way they think and behave, which means a substantive rather than symbolic adoption). However, as both ISO 9000 standards and the EFQM excellence model are used as frameworks to develop Quality Management (QM) practices, as faithful reflections of the principles and methods of QM (e.g. Kim *et al.*, 2010; Bayo *et al.*, 2011; Brown, 2013; Gómez *et al.*, 2017; Suárez *et al.*, 2017), analysis of the internalisation of the EFQM model can draw on the QM and quality standards internalisation literature. In fact, previous studies on the EFQM excellence model (e.g. Bou *et al.*, 2009; Escrig and de Menezes 2015; Calvo *et al.*, 2015; van Schoten *et al.*, 2016; Suárez *et al.*, 2016; Zárraga and Álvarez, 2016; Raharjo and Eriksson, 2017) have been developed under the wider umbrella of the QM literature.

Consequently, the purpose of this paper is to focus on this unexplored question and gain a deeper understanding of the internalisation of the EFQM model from two different perspectives. On the one hand, previous contributions in the context of management standards like ISO 9001 have generated some controversial conclusions regarding how relevant the motives for adoption are for internalisation. In this regard, the literature has shown different drivers underlying the adoption of ISO 9000 standards (e.g. Nair and Prajogo, 2009). According to these authors, and taking into account the institutional theory and the RBV, institutional (external motives) and functionalist (internal motives) drivers can be distinguished. Nair and Prajogo (2009) stated that both functionalist and institutionalist drivers have a positive relationship with the internalisation of ISO 9000 standards. Heras *et al.* (2011), however, concluded that internal reasons lead to a greater degree of internalisation. Thus, this

relationship remains unclear. Inspired by the literature concerning the ISO 9001 standard, the present study will analyse the role of internal and external motives in the internalisation of the EFQM model.

On the other hand, in separate systematic reviews of the literature on the EFQM model, La Rotta and Pérez (2017) and Suárez *et al.* (2017) underline the importance of employee involvement as a contributor to the successful adoption of the model. Similarly, some other researchers (e.g. Davies, 2008) have also suggested that employees' motivation and commitment are key issues needed to achieve complete integration of the EFQM model into an organisation's regular management practices. In this vein, "employee motivation" practices such as performance appraisal and performance-based compensation (Huselid, 1995; Obeidat *et al.*, 2016) could reinforce the desired employee involvement in the adoption and internalisation of the EFQM model. However, there is some controversy in the literature over the usefulness of these practices in the context of QM (e.g. Soltani *et al.*, 2006; Jiménez and Martínez, 2009; Escrig *et al.*, 2016), since some approaches to employee appraisal and recognition overlook system-level causes of performance variation and consider individuals as responsible for errors that are beyond their control, which may obstruct improvement efforts. Hence, it is interesting to examine which performance appraisal and compensation systems can contribute to achieving this internalisation.

By addressing this question, this paper contributes to the existing literature in several ways. First, to the best of our knowledge, this is the first study that focuses on the internalisation of the EFQM model; previous studies have focussed on the internalisation of ISO 9001 standards (e.g. Nair and Prajogo, 2009) or QM initiatives in general (e.g. Bello *et al.*, 2014). Second, while previous studies have addressed internalisation by concentrating on the motivations for adoption, the present study introduces another variable that may explain the substantive adoption of the EFQM model, namely, the role of appraisal and compensation systems. Thus, this study brings together different perspectives to explain the internalisation of the EFQM model. Finally, the paper contributes to the debate about the strength of the EFQM model as a continuous improvement tool, since it unveils the factors that could foster the integration of the model within the organisational routines, instead of being just a management fad. In doing so, it helps to bridge the research gap identified by La Rotta and Pérez (2017) and Suárez *et al.* (2017), namely, the need for research into the reasons that lead to the adoption of excellence models from an institutional perspective, as well as the barriers that could prevent real adoption of the EFQM model.

From this introduction, in the next section, we develop our research questions. We then explain the methodology used to analyse the data and provide details of the findings obtained. Finally, we discuss the results and the implications of our research.

2. Theoretical background

In what follows, we address, first, the concept of internalisation as the central variable for analysis, since adopting the EFQM model to obtain recognition may not necessarily imply internalisation. Then, we discuss the extent to which the motivations for adopting the EFQM model could be drivers for the internalisation of the model, which leads us to formulate the first research question. Finally, we deal with the issue of the role of performance appraisal and compensation systems in the internalisation achievement, bringing us to the second research question.

2.1 Internalisation of the EFQM excellence model

Over the last few years, there has been some debate in the literature regarding the extent to which the use of QM in general and management standards, such as ISO 9001, in

particular have been truly internalised within the organisation. As some scholars point out (e.g. Redman and Grieves, 1999; Taylor and Wright, 2003) a common cause of failure in adopting QM is the absence of a true assimilation of the good management practices embedded in these models by organisations' members. Consequently, the adoption of the models is surrounded by rhetoric, without there being a true internalisation in daily practices and the behaviour of employees. Institutional theory (DiMaggio and Powell, 1983) is an insightful theoretical explanation for this phenomenon. In the specific case of ISO 9001, Lo *et al.* (2011) warn that organisations may be interested in this meta-standard, and in ultimately reaching a certification, without being completely dedicated to the principles and practices that the standard advises.

In the literature about the adoption of meta-standards such as ISO 9001, some scholars have been interested in the concept of internalisation (e.g. Naveh and Marcus, 2004; Nair and Prajogo, 2009; Heras, 2011; Tari *et al.*, 2013; Ataseven *et al.*, 2014). For instance, Nair and Prajogo (2009) and Ataseven *et al.* (2014) point out that internalisation involves the active daily use of the practices associated with the ISO 9001 standard, with the intention of modifying behaviour and decision making, and fostering continuous improvement. In the same vein, Tari *et al.* (2013) consider internalisation as a process in which procedures and practices contained in the standards have become anchored in the beliefs of the organisation. In the wider QM literature, some scholars, such as Ford (2011), warn that organisations could make a genuine effort to adopt QM practices but in some contexts the adoption may be less authentic and would not be performance enhancing. In this second context, the adoption is more ceremonial and does not foster internalisation. Transferring the words of Ataseven *et al.* (2014) to the EFQM model, internalisation needs to be distinguished from the fact of having an EFQM recognition in place. In fact, Dubey (2016) caution that some organisations focus more on attaining recognition than on identifying improvement opportunities and learning from the EFQM model assessment process.

Therefore, in the context of the EFQM model, and inspired by these previous works, we agree with Davies (2008) in that there is a need to differentiate the adoption of the EFQM model from effective integration into daily practice. Following the conception of internalisation considered by Christmann and Taylor (2006), Nair and Prajogo (2009) Ford (2011) and Asif *et al.*'s (2009) conception of institutionalisation, we understand internalisation within the context of the EFQM model as the use of the good management practices embedded in the model in daily operations, which enables a substantive rather than symbolic adoption of the model, since individuals in the organisation are able to assume these practices as routines. Inspired by Nair and Prajogo's (2009) point of view, which in turn was based on Nonaka's (1994) model of knowledge creation, internalisation of the EFQM model will ensure the true assimilation of its underlying practices. Thus, organisations dedicated to the model can build knowledge capabilities that may make a difference.

2.2 Motives for adoption as drivers of internalisation

As Heras *et al.* (2006, 2011) and Gómez *et al.* (2016) point out, most of the studies about the motives for adopting QM have been based on the reasons for implementing ISO 9000, leaving aside the analysis of the motivations to embrace other models like the EFQM. In the context of the ISO 9001, the literature (e.g. Nair and Prajogo, 2009; Prajogo, 2011; Tari *et al.*, 2014) has usually characterised the motives for adopting ISO 9001 as being external and internal. Regarding the particular case of the EFQM model, taking into account previous contributions (e.g. Heras *et al.*, 2006, 2011; Gómez *et al.*, 2016), organisations also seem to adopt the EFQM model for both internal and external reasons.

On the one hand, some organisations may adopt the EFQM model for internal reasons, as a way to have guidance on how to improve both performance and processes. According to Taylor (1997), Heras *et al.* (2006, 2011) and Gómez *et al.* (2016), some internal reasons for adopting the EFQM model are the creation of a strategic framework, the creation of a participative style, the improvement of organisation and planning or the improvement of the quality of products and services. When internal motivations are present, the EFQM model is an appropriate and operational way to improve competencies in organisations due to its capacity to generate a set of performance standards and routines within the firm that encourage continuous improvement and the creation of knowledge and learning. In these cases, the RBV offers a useful lens to understand EFQM model internalisation since the fundamental concepts of the EFQM model can be integrated and understood as organisational resources to enhance performance, thereby fostering the organisation's quality culture (Nair and Prajogo, 2009), and in turn it is internalised in daily practice. As Castresana and Fernández (2005) and Zapata *et al.* (2016) contend, the EFQM model is useful to identify and enhance the resources and capabilities necessary to create value for stakeholders, to better address changes, and to ultimately generate sustainable competitive advantages. In a similar way, Kennedy and Fiss (2009) state that organisations have efficiency motivations to adopt QM, since it is seen as an opportunity to achieve gains in performance and internal functioning. Overall, in circumstances of internal drivers, adopting the model is more likely to achieve the commitment, assistance and widespread use among top management as well as the staff in general.

On the other hand, taking into account the arguments put forward by Martínez *et al.* (2008), Nair and Prajogo (2009) or Lo *et al.* (2011) within the context of ISO 9001 adoption, institutional theory suggests that some organisations could adopt the EFQM model for external reasons, to gain high status, in a search for legitimacy to comply with external pressures. As noted earlier, institutional theory draws on the idea that companies have to face a range of institutional pressures that shape their actions, policies and practices (Burbach and Royle, 2014). DiMaggio and Powell (1983) claim that a process of institutional isomorphism arises as a result, since organisations try to attain legitimacy in the context in which they operate by copying and adopting the behaviours and professional standards of key competitors or their particular environment sector. Therefore, in the words of Kennedy and Fiss (2009), some organisations are interested in QM because they are concerned with looking good. In this same line of thought, Ketokivi and Schroeder (2004) point out that organisations may be forced to adopt some practices because of some coercive mechanism, such as the power of customers. Hence, organisational actions could be driven by isomorphism pressures that lead organisations to adopt the EFQM model in order to fulfil expectations from their customers, because of mimetic pressure to match competitors' actions or because they perceive that the adoption of the model will enhance their reputation and image. Organisations that act on this motivation would see accreditation as the final aim of adopting the EFQM model, rather than as part of a process of QM reconversion (Askey and Dale, 1994).

Previous studies within the context of the adoption of ISO 9001 (e.g. Gotzamani *et al.*, 2007; Martínez *et al.*, 2008; Tari *et al.*, 2014) seem to agree that internal motives would lead organisations to obtain better results from the certification and greater internalisation. According to Tari *et al.* (2014), organisations committed to internal drivers embrace quality certification with a proactive approach, which is translated into differences regarding the benefits. Similar conclusions were reached by Sampaio *et al.* (2011), who stated that when organisations react to external forces, they may want to achieve the certificate as a goal in itself and end up adopting a minimalist attitude that results in limited internal changes in behaviour. Inspired by the conclusions from these studies in the context of ISO 9001,

external (institutional) factors are likely to promote a ceremonial adoption, since organisations try to adopt the EFQM model just at a surface level, which would not entail real internalisation. In fact, Heras *et al.* (2011) concluded that using the EFQM model for internal reasons leads organisations to a greater degree of use of QM tools and techniques, which authors consider a way to analyse how QM is internalised by firms. In the same line of reasoning, Asif *et al.* (2009) and Melão *et al.* (2017) concluded that the adoption of QM for external reasons and without real internal needs will probably lead to more difficulties in the adoption process, low commitment and low internalisation.

Nevertheless, some other authors (e.g. Terziovski *et al.*, 2003) concluded that external drivers are the most relevant for adopting some meta-standards and noted that these types of motives have a significant effect on performance, which would suggest that these motives play a role in the internalisation of these standards. Nair and Prajogo (2009), however, stated that both internal and external drivers have a positive relationship with the internalisation of ISO 9000 standards. In the same vein, inspired by the conclusions of Kennedy and Fiss (2009) regarding the effect of adoption motivation on the extent and content of QM implementation, both efficiency and legitimacy logic may influence the internalisation and substantive adoption of the EFQM model. The above discussion leads to our first research question:

RQ1. What is the relative influence of internal vs external adoption motives for the internalisation of the EFQM model?

2.3 The role of performance appraisal and compensation systems in internalisation

In order to achieve internalisation, employees need to perceive a practice as useful and the subject of commitment (Ford, 2011). In this vein, some authors (e.g. Davies, 2008; Bayo *et al.*, 2011; Dahlgaard *et al.*, 2013) suggest that this commitment and involvement with the EFQM model can be achieved by implementing appropriate human resources management practices, which in turn can become a relevant factor for successful EFQM model internalisation. More explicitly, Brown (2013) also suggests that rhetoric and lack of individuals' involvement can undermine initiatives to improve and sustain business excellence, and prevent their integration in the daily organisational practices.

Specifically, among human resource management practices, performance appraisal and compensation systems can play a role in the internalisation, since they strengthen collective responsibility for quality improvement as well as horizontal relations, contributing to the motivation and involvement of people in organisations adopting the EFQM model.

Although some scholars have questioned the practice of appraisal and rewards in the context of QM (e.g. Deming, 1986), rooted in the idea that performance dependent on working systems and mechanisms to monitor and reward employees' individual performance can lead to dissatisfaction and demotivation, the reality is that these practices are recognised to play an essential role in encouraging specific conducts in any organisation (Yang, 2010; Özutku, 2012). As Ooi *et al.* (2007) or Farndale *et al.* (2011) consider, employees expect to be recognised for their efforts at work and their contribution to achieving the objectives of the organisation. Thus, they perceive performance evaluation and pay systems as indicators of the organisation's support and commitment to them and, consequently, employees display a reciprocal behaviour by also showing their own involvement and commitment to the organisation. Sharma *et al.* (2010) noticed that for QM practices to become institutionalised, a performance evaluation system needs to be developed. O'Driscoll and Randall (1999) also show that employee satisfaction with compensation influences their job involvement and affective commitment to the organisation. As Ehigie and Akpan (2005) warn, rewards play a relevant role in enhancing the practice of QM, since is a way to gratify employees

for their input in QM practice and thus a way to demonstrate equity. For their part, Tari and Sabater (2006) concluded that organisations should strengthen the appraisal and compensation policy as a way to develop employee involvement and improve QM implementation.

In addition, Sekiguchi (2013) suggests that for appraisal and compensation systems to be effective in employee motivation, they should be designed in a consistent way, i.e., practices increasing the wage differential should be accompanied by fair assessment systems. In this vein, some authors (e.g. Jiménez and Martínez, 2009; Escrig *et al.*, 2016) describe the performance appraisal and compensation systems that could be more consistent with QM and the EFQM model: employees are involved in the design of the system, which strikes a balance between individual and group assessment and recognition; performance appraisal is oriented towards giving feedback and helping people to improve their skills and performance; and rewards and recognitions are linked to the appraisal and based on skills and collective performance. Since such practices are effectively promoting commitment to and employee involvement in excellence, they could contribute to the effective internalisation of the EFQM model in the organisation.

Although this consistent system is embedded in the EFQM model, the adoption of the model does not imply that all organisations follow exactly the same approach regarding appraisal and compensation systems. As stated by Balbastre and Canet (2011), the EFQM model is not a strategic formulation tool and does not give the organisation a specific strategic option, but only represents a framework and a guide for companies to manage themselves. It is a non-prescriptive model and organisations choose what is relevant for them. Therefore, strategic specifications regarding appraisal and compensation systems may be different among organisations that have adopted the EFQM model, and could lead to differences in internalisation. Hence, the following research question emerges:

RQ2. Does the presence of consistent appraisal and compensation systems increase the strength of internalisation of the EFQM model?

In light of the debate arising from this review of the literature, the research questions on the motives, performance appraisal and compensation systems and internalisation of the EFQM model are formulated for this study, as shown in Figure 1.

3. Methodology

3.1 Data

In order to answer the research questions posed, we approached the population of 462 Spanish organisations that had an EFQM recognition validated by the Club Excelencia en Gestión (CEG) (the EFQM's partner in Spain) in March 2013. Organisations adopting the EFQM excellence model can have their level of excellence recognised at four levels (Committed to Excellence 200+; Recognised for Excellence 300+; Recognised for Excellence 400+; Recognised for Excellence 500+), depending on the score obtained after a thorough process of self-assessment followed by an external assessment in which the organisation's

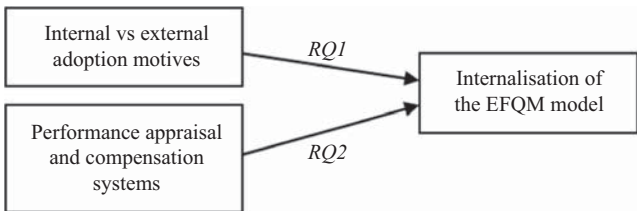


Figure 1.
Research model

performance is reviewed in each of the EFQM model criteria[1]. The CEG provided a list of these 462 organisations, categorised according to the level of excellence achieved, size, sector and region. Taking into account this information, we contacted the 462 organisations and obtained a representative sample of 180 organisations proportional to the population at each of the excellence levels: 17 organisations (9.4 per cent) were awarded Recognised for Excellence 500+, 40 organisations (22.2 per cent) held a 400+, 34 organisations (18.9 per cent) a 300+ and 89 organisations (49.4 per cent) a 200+ recognition. This sample reflected an adequate representation of the population (a confidence level of 95 per cent implies a sample error of ± 5.71 per cent for the whole sample). They represent different economic sectors (mainly health and social services, educational services, public administration and associations). Small (41.7 per cent), medium (35 per cent) and large (23.3 per cent) organisations are also represented in the sample.

The fieldwork was carried out between September and October 2013 by means of a telephone survey using the contact information for the organisations provided by the CEG. Prior to the survey, the questionnaire was sent to the representatives of CEG and several EFQM experts for their feedback, which led us to clarify the wording of some questions, but no changes were made to the essence of the content. In the telephone interview, the organisations were informed of the aim and the significance of the research project and the confidentiality of the responses. We gathered information from two different informants for each organisation. Questions regarding internalisation and motives underlying EFQM adoption were answered by the person in charge of quality issues in the organisation. The CEG database provided the names of these targeted informants, who are the management representatives of the quality system and EFQM adoption in the organisations. Questions regarding appraisal and compensation systems were answered by the head of human resources management.

3.2 Measures

The motives for EFQM adoption were developed from empirical studies that have examined the motives for adopting the EFQM model in particular and QM in general (e.g. Taylor, 1997; Heras *et al.*, 2006, 2011; Kennedy and Fiss, 2009; Poksinska *et al.*, 2010). For external motives three items were developed to represent isomorphic reasons that may influence the adoption of the model. Internal motives are captured in five items that represent the assumption that the EFQM model yields efficiency gains and will contribute to continuously improve organisational processes and performance.

The internalisation of the EFQM model was measured by adapting the items from Nair and Prajogo (2009), since their scale refers to the internalisation of ISO 9001. Bello *et al.* (2014) also proposed an adaptation of the scale of Nair and Prajogo in the context of QM practices. In our case, the measures focussed on the EFQM model and the items developed capture the way the EFQM model has been integrated into daily practice (see Table I). The essence of Nair and Prajogo's items (employees training in quality, explanation and communication to employees of the objectives and procedures; establishment and updating of processes, daily practices of the members of the organisation according to quality requirements and results of audits taken as a basis to improve processes and develop strategies) was captured and translated into our adapted questions. For instance, instead of audits, our item 2 refers to self-assessment, and we separated the Nair and Prajogo item on explanation and communication to employees of the objectives and procedures into two different items in our scale: definition of annual targets, deadlines and prioritisation of activities (item 3), and meetings with employees to provide them with the information (item 5). As a consequence, our final scale consisted of six items. Both this scale and the one measuring motives of adoption are five-point Likert type scales.

Table I.
Items, reliability and
descriptive statistics
for motives and
internalisation

Construct	Composite reliability	Items	Mean	SD
Internal motives	0.778	1. Improve the efficiency of internal processes (e.g. reducing costs, improving productivity)	4.46	0.72
		2. Improve the quality of products/services	4.56	0.74
		3. Promote a participative style among employees (improving their motivation, sense of belonging, etc.)	4.32	0.82
		4. Improve financial results	4.12	1.10
		5. Advance in QM beyond ISO certification	4.27	0.98
External motives	0.645	1. Fulfil demands of customers and other external agents	4.62	0.71
		2. Improve organisation image, as a marketing tool	4.38	0.76
		3. Follow management trends by imitating others	3.58	1.04
Internalisation	0.690	1. Organisation members have changed their behaviours to match the practices recommended by the EFQM model	4.17	0.74
		2. Information from self-assessment on the basis of the EFQM model is taken into account in drawing up the strategic plan	4.32	0.84
		3. Annual targets for improvement, agreed with personnel and specifying those responsible for its implementation, deadlines and prioritisation of activities, are defined	4.29	0.76
		4. Employees are continuously trained in the principles of quality and excellence, and in teamwork	4.09	0.91
		5. Meetings are held to provide employees with feedback on their performance in the quality and excellence field	3.72	1.02
		6. Indicators of all key processes are implemented and performance targets are established	4.36	0.72

To assess the performance appraisal and compensation systems, the items proposed by Jiménez and Sanz (2013) were used to analyse the degree of adoption of human resource management practices consistent with the EFQM model (see Table II) using a five-point semantic differential scale. From these items, different types of performance appraisal and compensation practices were identified by means of cluster analysis.

In addition, as suggested in the literature (e.g. Jayaram *et al.*, 2010), size and the length of time the organisation has been adopting the EFQM model are introduced into the model as control variables. The measurement of size was extracted from the information provided by the CEG, where organisations were categorised by the number of employees as small,

Table II.
Items and descriptive
statistics for appraisal
and compensation

Concepts	Items	Mean	SD
Performance appraisal	1. Periodic appraisal	4.02	1.45
	2. Evaluation of the development of tasks, skills and attitudes, rather than the achievement of objectives	3.70	1.33
	3. Evaluation of group's performance	2.88	1.22
	4. Evaluation of medium- and long-term performance	3.12	1.33
	5. Evaluation oriented towards performance improvement and personal development	4.40	0.93
	6. Employees are involved in their assessment	4.50	0.92
Compensation	7. Employees are informed of the results of the evaluation	4.40	0.92
	1. Pay above the market average	3.39	0.92
	2. Salary determined by the knowledge and skills possessed, rather than the position held	2.02	1.35
	3. Variable rewards	2.10	1.65
	4. Employees participate in determining wage components	1.99	1.46

medium and large organisations. Two dummy variables were introduced into the model, large being the reference category. The length of time they have been adopting the model was measured via a specific question posed to the quality manager.

3.3 Statistical procedure

The effect of motives on the internalisation of the EFQM model is tested by way of structural equation models within the EQS statistical programme (Bentler, 2006). With regard to the study of the effect of the appraisal and compensation systems, a cluster analysis (using, in two phases, both hierarchical and non-hierarchical clusters as suggested by Hair *et al.*, 2010) was conducted to identify different performance appraisal and compensation systems, and analysis of variance (ANOVA) was conducted to test for the existence of significant differences in the internalisation of the model among organisations employing each system.

4. Findings

4.1 Scales validation and contingent analysis

We used confirmatory factor analysis (CFA) to evaluate the dimensionality of the three constructs (internal motives, external motives and internalisation). A single CFA taking external and internal motives as first-order correlated factors was performed, where each item was allowed to load only on the target factor, and an individual CFA was performed for the internalisation construct. As attested by the goodness-of-fit values (Table III), the unidimensionality of each construct can be stated.

Table I reports the composite reliability (Fornell and Larcker, 1981) for the three concepts, the value of which allowed us to verify the reliability of the measurement. Convergent validity was assessed using the Bentler–Bonett index (Bentler and Bonett, 1980). Considering a cut-off value of 0.90, a high level of convergent validity was found for all the factors, as exhibited in Table III. To assess discriminant validity, for each pair of factors we conducted a “pair-wise test” (Bagozzi and Phillips, 1982). This test examines whether a CFA with two factors fits the data significantly better than a single-factor model. A statistically significant difference between the χ^2 values for the two models (degree of freedom = 1) will enable us to verify the existence of discriminant validity. The scaled χ^2 difference values (Satorra and Bentler, 2001) for all pairs were found to be statistically significant at the 5 per cent level, thereby providing evidence of the existence of discriminant validity. Having met the requirement of construct validity and reliability, the composite measure of each construct was measured by calculating their factor score values.

Next, several analyses (ANOVA and *t*-test) were performed to test significant differences regarding the dependent variable of our model, internalisation (INTER), and three contingent factors (see Table IV). With regard to the organisational size, no differences in internalisation are observed. Organisations with more time adopting the EFQM model report significant higher mean values in internalisation ($p < 0.05$). Finally, for organisations with the highest Level of Excellence (500+), the internalisation mean is significantly higher ($p < 0.05$) than for those of the lowest Level (200+). However, no differences were found between Recognised for Excellence recipients (300+, 400+, 500+).

	Satorra–Bentler χ^2	df	<i>p</i> -value	BB–NNFI	CFI	RMSEA
External and internal motives	23.573	19	0.213	0.935	0.956	0.037
Internalisation	12.539	9	0.184	0.914	0.948	0.047

Table III.
Dimensionality
of the scales

Table IV.
Internalisation and
contingent variables:
means comparison

Contingent variable	Groups	Intern mean	Groups showing significant differences
Size of organisation	Group 1: small	4.16	
	Group 2: medium	4.13	
	Group 3: large	4.16	
Time since adoption	Group 1: ≤3 years	4.06**	(1-2)**
	Group 2: > 3 years	4.23**	
Level of Excellence	Group 1: recognition 500+	4.41**	(1-4)**
	Group 2: recognition 400+	4.27	
	Group 3: recognition 300+	4.20	
	Group 4: recognition 200+	4.04**	

Note: ** $p < 0.05$

Additionally, following the suggestion of an anonymous reviewer, we conducted a complementary analysis to examine the degree of adoption of the EFQM enablers, as well as the relationship between this and the internalisation of the EFQM model. To do this, first we calculated the mean scores for the external assessment of the five EFQM enablers (leadership; strategy; people; partnership and resources; processes, products and services) as a proxy of the level of adoption[2]. These scores revealed the “Processes, products and services” criterion as having the highest mean value (45.71 out of 100 maximum points in the enabler criterion), while the “People” criterion has the lowest mean value (40.99 out of 100). Then, we calculated the correlations between the scores for each enabler criterion and the variable internalisation of the EFQM model. Results indicate that only the leadership criterion shows a positive and significant correlation with the internalisation of the EFQM model ($r = 0.25$; $p = 0.05$).

4.2 Analyses of structural relationships

To answer *RQ1*, regarding the motives that drive the internalisation of the EFQM model, a path analysis was carried out. The goodness-of-fit indices of the model (χ^2 S-B = 3.0727, $df = 6$; $p = 0.799$; B-BNFI = 0.981; CFI = 1; RMSEA = 0.00) show the adequacy of the model to the data.

As seen in Table V, the statistical values of the paths reveal a positive and significant relationship between internal motives to adopt EFQM model and internalisation, while external motives are seen to have no significant relationship with internalisation. This could be an indication that when the motivation to adopt the EFQM model is based only on external reasons, internalisation cannot occur.

Furthermore, the length of time the organisation has been adopting the EFQM model, which was introduced as one of the control variables, also shows a strong link with the internalisation of EFQM model ($\beta = 0.269$, $p < 0.01$). The size of the organisation does not influence the dependent variable. Therefore, the general assumption about the positive effect of internal motives on internalisation, that is, the substantive adoption of the EFQM model, is demonstrated for this sample. Nevertheless, the external motives for the EFQM model adoption do not yield the internalisation and the real adoption of the management practices and routines that this model supposes.

With the aim of obtaining a deeper understanding about the above results, another model was estimated, linking each motivation item (not as a composite measure) and the

Table V.
Analysis of the
relationships between
motives and
internalisation

Path to	Path from	Standardised solution
Internalisation	Internal motives	0.279***
	External motives	0.016

Note: *** $p < 0.01$

factor score of internalisation. This model also fits the data adequately (χ^2 S-B = 23.8617, df = 24; $p = 0.469$; B-BNFI = 0.916; CFI = 1; RMSEA = 0.00). The results of this analysis are reported in Table VI.

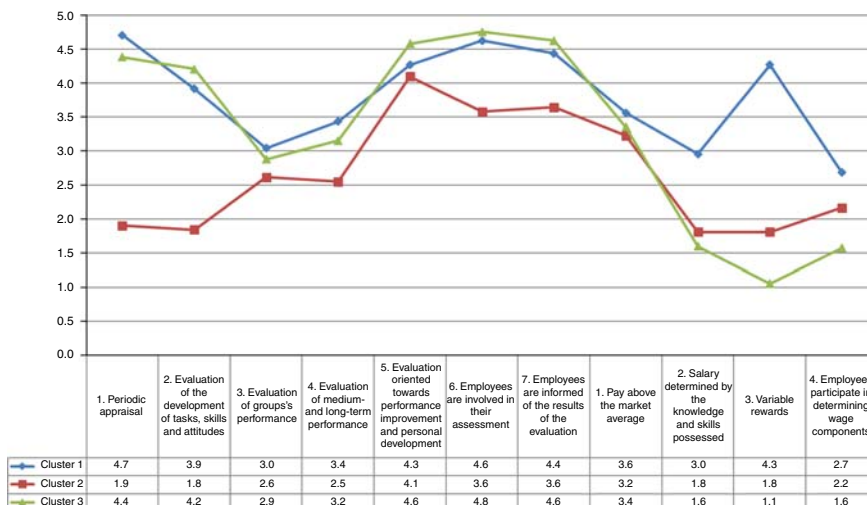
Surprisingly, only one of the internal motives has a significant and positive effect on internalisation. Control variables keep the same influence as in path analysis (time since EFQM adoption: $\beta = 0.278$, $p < 0.01$). Thus, it can be inferred that when an organisation decides to adopt the EFQM model due to the desire to promote a participative style among employees, the substantive adoption of the model is achieved. None of the other internal drivers or the external ones lead to an effective internalisation of the EFQM model. In addition to this, the idea that the length of time since the adoption of the model positively influences internalisation is reaffirmed.

Regarding RQ2, cluster analysis identified three different groups of organisations depending on the appraisal and compensation system employed. Figure 2 synthesises the mean values for each appraisal and compensation item in each group.

Path to	Path from	Standardised solution
Internalisation	Improve the efficiency of internal processes (e.g. reducing costs, improving productivity)	0.115
	Improve the quality of products/services	0.008
	Promote a participative style among employees (improving their motivation, sense of belonging, etc.)	0.187**
	Improve financial results	0.074
	Advance in QM beyond ISO certification	0.010
	Fulfil demands of customers and other external agents	0.021
	Improve organisation image, as a marketing tool	-0.054
	Follow management trends by imitating others	-0.018

Note: ** $p < 0.05$

Table VI.
Analysis of the
relationships between
motives (items) and
internalisation



Note: Cluster analysis was performed on the 170 organisations that answered the questions on appraisal and compensation

Figure 2.
Clusters identified and
mean values for
appraisal and
compensation

Hence, three different systems can be observed in organisations awarded EFQM recognition. These systems were defined as follows.

Group 1 (48 organisations). Consistent, development-oriented system: this system is aligned with what the QM literature suggests would be coherent with QM and excellence. It is characterised by appraisal performance practices oriented towards improvement and development, where a regular assessment of both how employees perform tasks and their attitudes (not just the achievement of objectives) is carried out. Variable compensation schemes that take into account employees' skills and attitudes and emphasise group performance-based incentives are noticeable.

Group 2 (31 organisations). Target achievement-focussed system: this is dedicated to evaluating and monitoring the achievement of targets. Performance appraisal is not developed regularly and is not oriented towards skills assessment. Likewise, salaries are not linked to the skills possessed and variable remuneration is not visible.

Group 3 (91 organisations). Unbalanced system: In this system, performance appraisal is similar to that of the development-oriented system, and thus it is based on regular assessment that encourages skill development. However, this approach is not aligned with the compensation practices, which mainly rely on fixed remuneration determined by job position rather than the skills possessed.

An analysis of variance (one-way ANOVA) was conducted to test for significant differences in the three groups of organisations described above (depending on the appraisal and compensation system employed) as regards internalisation. The means of the internalisation construct for the three groups are shown in Table VII.

The ANOVA results indicate that the level of internalisation is significantly different between organisations with a consistent system (group 1) and organisations with a target-focussed system (group 2), and between these and organisations with an unbalanced system (group 3). Groups 1 and 3, which differ in the compensation system they use, do not show significant differences in their means. This shows that one of the factors that makes a difference in the achievement of internalisation is having a performance appraisal system focussed on evaluating how employees perform tasks and their attitudes, and on encouraging their skills development (all of these are characteristics of groups 1 and 3), regardless of the pay system.

5. Discussion

5.1 Research implications

Recognition and internalisation of the EFQM model: two different concepts. This study has extended the research on the EFQM excellence model by analysing the concept of internalisation, which has been addressed before in the context of other QM approaches, such as ISO 9001 (e.g. Nair and Prajogo, 2009), but neglected in the specific case of the EFQM model. An analysis of the drivers of EFQM model internalisation provides a better understanding of the factors that contribute to the true integration of the model in everyday practices, the lack of which is considered to be a determinant of failure in the use

Table VII.
Results from the
ANOVA analysis

	1. Consistent, development-oriented system	2. Target achievement-focussed system	3. Unbalanced system	Groups showing significant differences
Internalisation	4.25	3.88	4.26	(1-2)*** (3-2)***
Note: *** $p < 0.01$				

of the model. Results indicated that only for organisations with the highest level of Excellence (500+) was the internalisation significantly higher than for those of the lowest level (200+), while no differences were found in the degree of internalisation between the organisations awarded “Recognised for excellence”. Thus, for these organisations, internalisation is not dependent on the level of excellence obtained in the application for recognition. These findings have evidenced that it is worth distinguishing between having EFQM recognition and the true internalisation of the model, and suggests that some organisations may be more motivated by gaining legitimisation when adopting the EFQM model, in line with institutional theory, than by really introducing a process of change in daily practices.

Drivers of internalisation of the EFQM excellence model. The study identified several factors that act as drivers of EFQM model internalisation. First, we approached the lack of clarity regarding the influence of motives on internalisation drawing on both institutional theory and the RBV. Our findings suggest that internal reasons are more relevant than external drivers to achieving the internalisation of the model, as expected from the conclusion of Heras *et al.* (2011). The findings seem to tally with the conclusions of Jang and Lin (2008) in the context of the ISO 9001 in that if organisations pursue an external recognition just as a response to external pressures, they are doomed to failure. These findings suggest that external drivers may improve internalisation if they are transformed into internal motives, as derived from previous studies on QM (e.g. Jang and Lin, 2008). From the theoretical basis of institutional theory this is understandable, given that external reasons make organisations tend to adjust to the reference models mainly at an administrative or perfunctory level (Martínez *et al.*, 2008), which prevents the overall workforce from taking the EFQM model as a basis for a real improvement and guidance for their daily routines. In contrast, and as supported by the RBV, managers driven by internal motives see the adoption of the EFQM model as an opportunity to enhance their resources. As Tarí *et al.* (2014) hold, from this perspective, one could expect that the adoption of the model will imply deeper and more proactive work with the model and the development of resources by making use of quality instruments and methods that help to internalise the essence of the model.

Second, of the different internal motives, the search for a participative style among employees is the motive that seems to drive a substantive adoption of the EFQM model. This would imply that the motivation linked to people is relevant to the internalisation of the model. The rest of the reasons, although they are internal, refer to improving processes, quality of products or business results, that is, they are more related to methodological and technical issues, tallying more with the “hard” elements of QM (Escrig *et al.*, 2018). Hence, it can be inferred that, despite the laudable aims of, for instance, improving service quality or financial results, internalisation cannot be achieved unless the “people” component is taken into account in adopting the EFQM model. This makes sense if we follow the definition of the internalisation concept, namely, the true assimilation by the organisation’s members of the good management practices embedded in the model. If the driver of the EFQM model adoption involves concern for generating a participative style and engaging the workforce, organisations are seeking a balance between the attitudes and behaviours of individuals and the aspirations and goals of the organisation. Special care is taken so that people at all levels engage with the adoption of the model (e.g. participate in the self-assessment or in the improvement plans), instead of being treated as a stand-alone, *ad hoc* initiative managed by the technicians in the quality department. These employees will therefore be more aware of the importance and usage of the model, so they will make the tools and practices part of their daily routine way of working.

Moreover, as employee participation is key to the successful adoption of BEMs (e.g. Brown, 2013; Dahlggaard *et al.*, 2013; Escrig and de Menezes, 2015) organisations motivated to generate

a participative style are more likely to truly assimilate the components of the EFQM model. Hence, employees will more easily assume the values and systems developed by leadership, and get involved in deploying the strategy, since they will have participated in its design and will take on board the objectives and policies derived from it. In addition, people development and empowerment can be better implemented since the model is designed for this purpose. Finally, more effective management of resources and processes to deliver increasing value for customers and other stakeholders is expected since individuals will be more involved in the management of resources and processes. As Bakotić and Rogošić (2017) conclude in the context of QM, employees' involvement is a key to making improvements, since they will apply their knowledge and capabilities to solve problems and develop processes, and in turn, contribute to the process of change. All in all, adopting the model with this participative style enables organisational commitment and a feeling of ownership in the processes, leading to the reinforcement and deployment of a culture of excellence, which, according to Dahlgaard *et al.* (2013) and Doeleman *et al.* (2014), is critical to integrating the components of BEMs at the operational level.

Third, studies dedicated to the internalisation of QM have focussed above all on the influence of reasons for adoption as antecedents of internalisation (e.g. Nair and Prajogo, 2009). Our work unveils motivational practices regarding performance evaluation and compensation systems as another important factor to facilitate the internalisation of the EFQM excellence model. Organisations that use these systems to support and foster the commitment of employees by developing their abilities achieve a more substantive adoption of the EFQM model. In contrast, organisations that have a system focussed on meeting targets and neglect regular evaluations for skills development and variable remuneration, seem to obtain lower levels of internalisation. Having the sole concern of achieving goals seems to lead to a poorer internalisation of the EFQM model. Overall, given that there are no significant differences in the internalisation level between organisations that differ in the compensation system employed, the results suggest that the type of compensation system is not relevant in the achievement of the internalisation. It seems that what makes the difference is the appraisal system. Thus, the study shows that a performance appraisal system-oriented towards the development of employees encourages further internalisation of the practices embedded in the EFQM model, compared with a system that is more centred on achieving objectives. This again brings to the fore the relevance of the human factor for successful EFQM model internalisation, and, specifically, highlights the importance of intrinsic motivation in organisations, according to self-determination theory (Deci and Ryan, 2000).

These findings extend previous work such as Ooi *et al.* (2007) or Farndale *et al.* (2011), by showing that employees display greater involvement in a system that evaluates their effort, contributes to their development and gives them the opportunity to participate in their evaluation. In this sense, the results of this study contribute to the literature addressing the effective internalisation of QM, thereby opening up a line of work in the field of more advanced QM models, such as the EFQM model, while highlighting another relevant factor to facilitate such internalisation.

Fourth, findings also suggest that having a good leadership approaches are correlated with the level of internalisation, showing that a challenge for organisations adopting the EFQM model is to win leadership support so that the EFQM model could lead to a transformation of the organisational culture and true internalisation. The involvement of leadership through the provision of the necessary resources and by trying to make the model meaningful for people throughout the organisation appears to be fundamental for internalisation. Hence, our findings open new research avenues by pointing to leadership as another factor that may influence the internalisation of the EFQM model, in addition to

being a fundamental predictor of business results in the context of the EFQM model, as previous research has found (e.g. Raharjo and Eriksson, 2017).

Relevance of soft issues to internalisation of the EFQM excellence model. Overall, our study reinforces the importance of the soft side of the EFQM model, and the relevance of human resources practices in the context of EFQM model adoption, as suggested in previous studies (e.g. Calvo *et al.*, 2015; Escrig and de Menezes, 2015). When it comes to the true internalisation of the EFQM model, what really makes a difference is leadership that institutionalises a structure based on values, which encourages employee autonomy and participation in the improvement actions. This raises the importance of the resource and capabilities perspective in the study of BEMs, as highlighted by Zapata *et al.* (2016). Unless organisations promote people's participation in the adoption of BEMs, these models will not be inserted in the core activities and daily practice and the model will have a more symbolic and rhetoric value.

It is especially worth noting that these people-related elements are harder for recipients of EFQM recognition to achieve, which tallies with previous studies such as Escrig and de Menezes (2015) and, therefore, organisations should direct greater efforts to harnessing the organisational values that would promote an organisational shift towards a more participative style.

Some remarks on the controversy surrounding performance-related pay. This study also has implications regarding the controversy that appears in the literature regarding the usefulness of performance-related pay in the context of a QM initiative. Some QM scholars (e.g. Deming, 1986; Bowman, 1994) consider these practices counterproductive as a means of fostering the collaborative behaviours needed in QM among employees. They argue against payment based on incentives, claiming that, as performance depends on working systems and is influenced by factors beyond the employee's control, what is important is an appraisal system focussed on the assessment of group results and oriented towards the development of skills. Our results seem to support this view as the relevance of the appraisal system for internalisation appears to be stronger than a compensation system based on the achievement of targets. An orientation towards goal achievement does not seem to lead to the substantive adoption of the EFQM model. As Özutku (2012) highlights, what seems to be important for implementing QM is the intrinsic reward system.

Influence of the length of adoption on the internalisation of the EFQM excellence model. Finally, the findings from this study also have implications for the literature regarding the duration of a QM initiative. The number of years the organisation has adopted the EFQM model is found to have a positive association with internalisation, thus evidencing that the greater the number of years adopting the model is, the greater the substantive adoption of the model will be. As Jayaram *et al.* (2010) state, the precepts of learning theory could explain the important role of duration for QM success. With longer adoption, employees become familiar with the practices embedded in the EFQM model, realise their benefits, some routines are created and, consequently, the learning achieved may make them more likely to use them as daily practices.

5.2 Managerial implications

This study offers some guidelines regarding the kind of issues that contribute to the embeddedness of the EFQM model. Just adopting the model to fulfil the demands of customers and other external stakeholders is not the way to achieve a true assimilation of the model into daily practices. This kind of external motivations needs to end up activating and promoting employees' active engagement in internal improvements. In addition, to internalise EFQM as a daily practice, management responsibility plays a vital role in promoting a participative style among employees. This could ensure that the approach to

the EFQM model is not merely symbolic. Organisations could improve the internalisation of the model through regular meetings with employees as a signal that their opinions matter, and by trying to generate the necessary participative style. For instance, implementing empowerment programmes that allow employees to make suggestions for improvement and build an environment of communication (Tari and Sabater, 2006) will in turn foster the true assimilation and rollout of the model under EFQM recognition circumstances given that the workforce feel they are a vital part of the process. Moreover, and given the importance of the specific practices that organisations develop within the context of the EFQM model, managers should emphasise consistent appraisal and compensation systems oriented towards assessing and developing employees' skills. The awareness of the conditions of effective internalisation of the model should serve to promote effective organisational practices that make it possible.

5.3 Limitations and future lines of research

The present study has some limitations, which indicate avenues for further research. First, we analysed Spanish organisations, as representatives of one country where the use of the EFQM model is widespread. However, this focus on only one country would restrict the generalisation of results, and future studies should be proposed to study an international sample of recognised organisations. Second, we focus on motives and appraisal and compensation systems as antecedents of the internalisation of the EFQM model. Future research would need to be developed to look deeper into the role that other human resource management practices could play in internalising the use of the EFQM model. Moreover, we intend to examine the findings obtained through a qualitative study in organisations adopting the EFQM model, which should allow us to complement the analysis of the data obtained from the survey. Finally, an open line of research involves the study of the consequences that the use of these performance appraisal and compensation systems has on the behaviour and attitudes of employees. These future lines of research will enable us to gain a better understanding of the reality of the organisations that have embarked upon a path towards excellence.

6. Conclusion

Drawing on the institutional theory and RBV, this study has provided evidence that internal reasons are more relevant than external drivers to achieve a true internalisation of the EFQM model. In particular, the search for a participative style among employees is the motive that seems to drive a substantive adoption of the EFQM model. Moreover, our work unveils motivational practices regarding performance evaluation and compensation as an important factor to facilitate the internalisation of a QM model. Thus, the study shows that a performance appraisal system-oriented towards the development of employees encourages further internalisation of the practices embedded in the EFQM model compared with systems that are more centred on the achievement of targets. Overall, the present research has contributed by offering some orientations about the kind of practices that further the effectiveness of the EFQM model.

Notes

1. In the case of Committed to Excellence 200+, there is no detailed external assessment for each criterion of the EFQM model, and organisations therefore do not have an external assessment score. The independent assessors only review and validate the outcomes of the self-assessment and the proposed improvement projects (for more information see www.clubexcelencia.org and www.efqm.org).

2. We obtained most of the applicants' score data from their application for the EFQM Recognition for Excellence (level 300+, 400+ and 500+). As we explained above, organisations with the level of Committed to Excellence (200+) are not given a score from the external assessment. We therefore only had information about these scores from 86 firms with the other levels of excellence (47.78 per cent of the sample).

References

- Araújo, M. and Sampaio, P. (2014), "The path to excellence of the Portuguese organisations recognised by the EFQM model", *Total Quality Management & Business Excellence*, Vol. 25 Nos 5-6, pp. 427-438.
- Asif, M., Joost de Bruijn, E., Douglas, A. and Fisscher, O.A. (2009), "Why quality management programs fail: a strategic and operations management perspective", *International Journal of Quality & Reliability Management*, Vol. 26 No. 8, pp. 778-794.
- Askey, J.M. and Dale, B.G. (1994), "From ISO series registration to total quality management: an examination", *Quality Management Journal*, Vol. 1 No. 4, pp. 67-76.
- Ataseven, C., Prajogo, D.I. and Nair, A. (2014), "ISO 9000 internalization and organizational commitment: implications for process improvement and operational performance", *IEEE Transactions on Engineering Management*, Vol. 6 No. 1, pp. 5-17.
- Bagozzi, R.P. and Phillips, L.W. (1982), "Representing and testing organizational theories: a holistic construal", *Administrative Science Quarterly*, Vol. 27 No. 3, pp. 459-489.
- Bakotić, D. and Rogošić, A. (2017), "Employee involvement as a key determinant of core quality management practices", *Total Quality Management & Business Excellence*, Vol. 28 Nos 11-12, pp. 1209-1226.
- Balbastre, F. and Canet, M.T. (2011), "The strategy formation process in the EFQM excellence model: a critical review and new perspectives", *Total Quality Management & Business Excellence*, Vol. 22 No. 7, pp. 727-742.
- Bayo, A., Merino, J., Escamilla, S.A. and Selvam, R.M. (2011), "The impact of ISO 9000 and EFQM on the use of flexible work practices", *International Journal of Production Economics*, Vol. 130 No. 1, pp. 33-42.
- Bello, A., Heras, I. and Merino, J. (2014), "The internalisation of quality management practices: empirical evidences from manufacturing companies", *21st EurOMA Conference, Palermo, June*.
- Bentler, P.M. (2006), *EQS 6 Structural Equations Program Manual*, Multivariate Software, Encino, CA.
- Bentler, P.M. and Bonett, D.G. (1980), "Significance tests and goodness of fit in the analysis of covariance structures", *Psychological Bulletin*, Vol. 88 No. 3, pp. 588-606.
- Bou, J.C., Escrig, A.B., Roca, V. and Beltrán, I. (2009), "An empirical assessment of the EFQM excellence model: evaluation as a TQM framework relative to the MBNQA model", *Journal of Operations Management*, Vol. 27 No. 1, pp. 1-22.
- Boulter, L., Bendell, T. and Dahlgaard, J. (2013), "Total quality beyond North America: a comparative analysis of the performance of European excellence award winners", *International Journal of Operations & Production Management*, Vol. 33 No. 2, pp. 197-215.
- Bowman, J. (1994), "At last, an alternative to performance appraisal: total quality management", *Public Administration Review*, Vol. 54 No. 2, pp. 129-136.
- Brown, A. (2013), "Managing challenges in sustaining business excellence", *International Journal of Quality & Reliability Management*, Vol. 30 No. 4, pp. 461-475.
- Burbach, R. and Royle, T. (2014), "Institutional determinants of e-HRM diffusion success", *Employee Relations*, Vol. 36 No. 4, pp. 354-375.
- Calvo, A., Picón, A., Ruiz, C. and Cauzo, L. (2015), "Contextual and mediation analysis between TQM critical factors and organisational results in the EFQM excellence model framework", *International Journal of Production Research*, Vol. 53 No. 7, pp. 2186-2201.

- Castresana, J.I. and Fernández, R. (2005), "Theoretical foundation of the EFQM model: the resource-based View", *Total Quality Management*, Vol. 16 No. 1, pp. 31-55.
- Christmann, P. and Taylor, G. (2006), "Firm self-regulation through international certifiable standards: determinants of symbolic versus substantive implementation", *Journal of International Business Studies*, Vol. 37 No. 6, pp. 863-878.
- Dahlgaard, J.J., Chen, C.K., Jang, J.Y., Banegas, L.A. and Dahlgaard-Park, S.M. (2013), "Business excellence models: limitations, reflections and further development", *Total Quality Management & Business Excellence*, Vol. 24 Nos 5-6, pp. 519-538.
- Davies, J. (2008), "Integration: is it the key to effective implementation of the EFQM excellence model?", *International Journal of Quality & Reliability Management*, Vol. 25 No. 4, pp. 383-399.
- Deci, E.L. and Ryan, R.M. (2000), "The 'what' and 'Why' of goal pursuits: human needs and the self-determination of behavior", *Psychological Inquiry*, Vol. 11 No. 4, pp. 227-268.
- Deming, E. (1986), *Out of the Crisis. Quality, Productivity and Competitive Position*, Cambridge University Press, Cambridge, MA.
- DiMaggio, P.J. and Powell, W.W. (1983), "The iron case revisited, institutional isomorphism and collective rationality in organizational fields", *American Sociological Review*, Vol. 48 No. 2, pp. 147-160.
- Doeleman, H.J., Ten Have, S. and Ahaus, C.T.B. (2014), "Empirical evidence on applying the European foundation for quality management excellence model, a literature review", *Total Quality Management & Business Excellence*, Vol. 25 Nos 5-6, pp. 439-460.
- Dubey, M. (2016), "Developing an agile business excellence model for organizational sustainability", *Global Business and Organizational Excellence*, Vol. 35 No. 2, pp. 60-71.
- Ehigie, B.O. and Akpan, R.C. (2005), "Psycho-social factors influencing practice of total quality management in some Nigerian organizations", *Journal of Managerial Psychology*, Vol. 20 No. 5, pp. 355-379.
- Escrig, A.B. and de Menezes, L.M. (2015), "What characterizes leading companies within business excellence models? An analysis of 'EFQM recognized for excellence' recipients in Spain", *International Journal of Production Economics*, Vol. 169, pp. 362-375.
- Escrig, A.B., Bou, J.C. and Beltrán, I. (2016), "Performance appraisal and compensation in EFQM recognised organisations: rhetoric and reality", *Universia Business Review*, No. 50, pp. 72-105.
- Escrig, A.B., Segarra, M., García, B. and Beltrán, I. (2018), "The impact of hard and soft quality management and proactive behaviour in determining innovation performance", *International Journal of Production Economics*, Vol. 200, pp. 1-14.
- Farndale, E., Van Ruiten, J., Kelliher, C. and Hope-Hailey, V. (2011), "The influence of perceived employee voice on organisational commitment: an exchange perspective", *Human Resource Management*, Vol. 50 No. 1, pp. 113-129.
- Ford, M.W. (2011), "Customized compliance: exploring patterns of quality practice adoption in a multidivisional context", *The Quality Management Journal*, Vol. 18 No. 3, pp. 21-32.
- 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.
- Gómez, J.G., Martínez, M. and Martínez, A.R. (2017), "EFQM excellence model and TQM: an empirical comparison", *Total Quality Management & Business Excellence*, Vol. 28 Nos 1-2, pp. 88-103.
- Gómez, R., Serrano, A.M. and López, M.C. (2016), "Motivations for implementing TQM through the EFQM model in Spain: an empirical investigation", *Total Quality Management & Business Excellence*, Vol. 27 Nos 11-12, pp. 1224-1245.
- Gotzamani, K.D., Tsiotras, G.D., Nicolaou, M., Nicolaides, A. and Hadjiadamou, V. (2007), "The contribution to excellence of ISO 9001: the case of certified organisations in Cyprus", *The TQM Magazine*, Vol. 19 No. 5, pp. 388-402.
- Hair, J., Anderson, R., Black, B., Babin, B. and Black, W. (2010), *Multivariate Data Analysis*, Pearson Education, London.
- Heras, I. (2011), "Internalization of ISO 9000: an exploratory study", *Industrial Management & Data Systems*, Vol. 111 No. 8, pp. 1214-1237.

- Heras, I., Arana, G. and Casadesús, M. (2006), "A Delphi study on motivation for ISO 9000 and EFQM", *International Journal of Quality & Reliability Management*, Vol. 23 No. 7, pp. 807-827.
- Heras, I., Casadesús, M. and Marimon, F. (2011), "The impact of ISO 9001 standard and the EFQM model: the view of the assessors", *Total Quality Management*, Vol. 22 No. 2, pp. 197-218.
- Huselid, M.A. (1995), "The impact of human resource management practices on turnover, productivity, and corporate financial performance", *Academy of Management Journal*, Vol. 38 No. 3, pp. 635-672.
- Jang, W.Y. and Lin, C.I. (2008), "An integrated framework for ISO 9000 motivation, depth of ISO implementation and firm performance", *Journal of Manufacturing Technology Management*, Vol. 19 No. 2, pp. 194-216.
- Jayamaha, N., Grigg, N. and Mann, R. (2009), "A study of the validity of three major business excellence models in the Asia Pacific region", *Total Quality Management*, Vol. 20 No. 11, pp. 1213-1227.
- Jayaram, J., Ahire, S.L. and Dreyfus, P. (2010), "Contingency relationships of firm size, TQM duration, unionization, and industry context on TQM implementation: a focus on total effects", *Journal of Operations Management*, Vol. 28 No. 4, pp. 345-356.
- Jiménez, D. and Martínez, M. (2009), "The performance effect of HRM and TQM: a study in Spanish organizations", *International Journal of Operations & Production Management*, Vol. 29 No. 12, pp. 1266-1289.
- Jiménez, D. and Sanz, R. (2013), "Studying the effect of HRM practices on the knowledge management process", *Personnel Review*, Vol. 42 No. 1, pp. 28-49.
- Kennedy, M.T. and Fiss, P.C. (2009), "Institutionalization, framing, and diffusion: the logic of TQM adoption and implementation decisions among US hospitals", *Academy of Management Journal*, Vol. 52 No. 5, pp. 897-918.
- Ketokivi, M.A. and Schroeder, R.G. (2004), "Strategic, structural contingency and institutional explanations in the adoption of innovative manufacturing practices", *Journal of Operations Management*, Vol. 22 No. 1, pp. 63-89.
- Kim, D.Y., Kumar, V. and Murphy, S.A. (2010), "European foundation for quality management business excellence model: an integrative review and research agenda", *International Journal of Quality & Reliability Management*, Vol. 27 No. 6, pp. 684-701.
- La Rotta, D. and Pérez, J. (2017), "A relevant literary space on the use of the European foundation for quality management model: current state and challenges", *Total Quality Management & Business Excellence*, Vol. 28 Nos 13-14, pp. 1447-1468.
- Lo, C.K., Yeung, A.C. and Cheng, T.E. (2011), "Meta-standards, financial performance and senior executive compensation in China: an institutional perspective", *International Journal of Production Economics*, Vol. 129 No. 1, pp. 119-126.
- Martínez, M., Martínez, A.R. and Choi, T.Y. (2008), "Simultaneous consideration of TQM and ISO 9000 on performance and motivation: an empirical study of Spanish companies", *International Journal of Production Economics*, Vol. 113 No. 1, pp. 23-39.
- Melão, N.F., Guia, S.M. and Amorim, M. (2017), "Quality management and excellence in the third sector: examining European quality in social services (EQUASS) in non-profit social services", *Total Quality Management & Business Excellence*, Vol. 28 Nos 7-8, pp. 840-857.
- Mohammad, M., Mann, R., Grigg, N. and Wagner, J.P. (2011), "Business excellence model: an overarching framework for managing and aligning multiple organisational improvement initiatives", *Total Quality Management & Business Excellence*, Vol. 22 No. 11, pp. 1213-1236.
- Nair, A. and Prajogo, D. (2009), "Internalisation of ISO 9000 standards: the antecedent role of functionalist and institutionalist drivers and performance implications", *International Journal of Production Research*, Vol. 47 No. 16, pp. 4545-4568.
- Naveh, E. and Marcus, A.A. (2004), "When does the ISO 9000 quality assurance standard lead to performance improvement? Assimilation and going beyond", *IEEE Transactions on Engineering Management*, Vol. 51 No. 3, pp. 352-363.

- Nonaka, I. (1994), "A dynamic theory of organisational knowledge creation", *Organization Science*, Vol. 5 No. 1, pp. 14-37.
- O'Driscoll, M.P. and Randall, D.M. (1999), "Perceived organisational support, satisfaction with rewards, and employee job involvement and organisational commitment", *Applied Psychology*, Vol. 48 No. 2, pp. 197-209.
- Obeidat, S.M., Mitchell, R. and Bray, M. (2016), "The link between high performance work practices and organizational performance: empirically validating the conceptualization of HPWP according to the AMO model", *Employee Relations*, Vol. 38 No. 4, pp. 578-595.
- Ooi, K.B., Bakar, N.A., Arumugam, V., Vellapan, L. and Loke, L.K. (2007), "Does TQM influence employees' job satisfaction? An empirical case analysis", *International Journal of Quality & Reliability Management*, Vol. 24 No. 1, pp. 62-77.
- Özutku, H. (2012), "The influence of intrinsic and extrinsic rewards on employee results: an empirical analysis in Turkish manufacturing industry", *Business and Economics Research Journal*, Vol. 3 No. 3, pp. 29-48.
- Peteraf, M.A. (1993), "The cornerstones of competitive advantage: a resource-based view", *Strategic Management Journal*, Vol. 14 No. 3, pp. 179-191.
- Pipan, K.K., Gomišček, B. and Mayer, J. (2012), "Exploratory study of quality and excellence approaches and continuous improvement from the perspective of new institutionalism", *Journal for East European Management Studies*, Vol. 17 No. 3, pp. 313-332.
- Pokinska, B., Pettersen, J., Elg, M., Eklund, J. and Witell, L. (2010), "Quality improvement activities in Swedish industry: drivers, approaches, and outcomes", *International Journal of Quality and Service Sciences*, Vol. 2 No. 2, pp. 206-216.
- Prago, D.I. (2011), "The roles of firms' motives in affecting the outcomes of ISO 9000 adoption", *International Journal of Operations & Production Management*, Vol. 31 No. 1, pp. 78-100.
- Raharjo, H. and Eriksson, H. (2017), "Exploring differences between private and public organizations in business excellence models", *International Journal of Operations & Production Management*, Vol. 37 No. 12, pp. 1795-1816.
- Redman, T. and Grievies, J. (1999), "Managing strategic change through TQM: learning from failure", *New Technology, Work and Employment*, Vol. 14 No. 1, pp. 45-61.
- Sampaio, P., Saraiva, P. and Rodrigues, A.G. (2011), "ISO 9001 certification forecasting models", *International Journal of Quality & Reliability Management*, Vol. 28 No. 1, pp. 5-26.
- Satorra, A. and Bentler, P.M. (2001), "A scaled difference chi-square test statistic for moment structure analysis", *Psychometrika*, Vol. 66 No. 4, pp. 507-514.
- Sekiguchi, T. (2013), "Theoretical implications from the case of performance-based human resource management practices in Japan: management fashion, institutionalization and strategic human resource management perspectives", *The International Journal of Human Resource Management*, Vol. 24 No. 3, pp. 471-486.
- Sharma, U., Lawrence, S. and Lowe, A. (2010), "Institutional contradiction and management control innovation: a field study of total quality management practices in a privatized telecommunication company", *Management Accounting Research*, Vol. 21 No. 4, pp. 251-264.
- Soltani, E., van der Meer, R., Williams, T.M. and Lai, P. (2006), "The compatibility of performance appraisal systems with TQM, principles – evidence from current practice", *International Journal of Operations & Production Management*, Vol. 26 No. 1, pp. 92-112.
- Suárez, E., Calvo, A. and Roldán, J.L. (2016), "The role of strategic planning in excellence management systems", *European Journal of Operational Research*, Vol. 248 No. 2, pp. 532-542.
- Suárez, E., Calvo, A., Roldán, J.L. and Periañez, R. (2017), "Quantitative research on the EFQM excellence model: a systematic literature review (1991–2015)", *European Research on Management and Business Economics*, Vol. 23 No. 3, pp. 147-156.
- Tari, J.J. and Sabater, V. (2006), "Human aspects in a quality management context and their effects on performance", *International Journal of Human Resource Management*, Vol. 17 No. 3, pp. 484-503.

- Tarí, J.J., Heras, I. and Dick, G.P.M. (2014), "Internal and external drivers for quality certification in the service industry: do they have different impacts on success?", *Service Business*, Vol. 8 No. 2, pp. 337-354.
- Tarí, J.J., Heras, I. and Pereira, J. (2013), "Internalization of quality management in service organizations", *Managing Service Quality*, Vol. 23 No. 6, pp. 456-473.
- Taylor, W.A. (1997), "Leadership challenges for smaller organisations: self-perceptions of TQM implementation", *Omega*, Vol. 25 No. 5, pp. 567-579.
- Taylor, W.A. and Wright, G.H. (2003), "A longitudinal study of TQM implementation: factors influencing success and failure", *Omega*, Vol. 31 No. 2, pp. 97-111.
- Terziovski, M., Power, D. and Sohal, A.S. (2003), "The longitudinal effects of the ISO 9000 certification process on business performance", *European Journal of Operational Research*, Vol. 146 No. 3, pp. 580-595.
- van Schoten, S., de Blok, C., Spreeuwenberg, P., Groenewegen, P. and Wagner, C. (2016), "The EFQM model as a framework for total quality management in healthcare: results of a longitudinal quantitative study", *International Journal of Operations & Production Management*, Vol. 36 No. 8, pp. 901-922.
- Yang, J. (2010), "The knowledge management strategy and its effect on firm performance: a contingency analysis", *International Journal of Production Economics*, Vol. 25 No. 2, pp. 215-223.
- Zapata, L., Cantu, J.H. and González, F.R. (2016), "Resource and dynamic capabilities in business excellence models to enhance competitiveness", *The TQM Journal*, Vol. 28 No. 6, pp. 847-868.
- Zárraga, M. and Álvarez, M.J. (2016), "Efficient information-related practices in companies committed to EFQM", *The TQM Journal*, Vol. 28 No. 6, pp. 798-813.

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