

Role of the human talent in total quality management–performance relationship: an investigation in the transport sector

Angelos Pantouvakis & Maria Karakasnaki

To cite this article: Angelos Pantouvakis & Maria Karakasnaki (2017) Role of the human talent in total quality management–performance relationship: an investigation in the transport sector, *Total Quality Management & Business Excellence*, 28:9-10, 959-973, DOI: 10.1080/14783363.2017.1303873

To link to this article: <http://dx.doi.org/10.1080/14783363.2017.1303873>



Published online: 21 Mar 2017.



Submit your article to this journal [↗](#)



Article views: 136



View related articles [↗](#)



View Crossmark data [↗](#)

Role of the human talent in total quality management–performance relationship: an investigation in the transport sector

Angelos Pantouvakis* and Maria Karakasnaki

Department of Maritime studies, University of Piraeus, Piraeus, Greece

Recognising the importance of the human factor in all quality management systems and following the recent trends in the human resource management (HRM) literature that address the concept of talent, this study aims to investigate whether the adoption of the total quality management (TQM) philosophy inside service organisations leads to performance gains while taking into account the role of the human talent philosophies. A structured questionnaire was developed and distributed to maritime companies located in Greece and responses were collected mainly from the Quality and Safety managers. Finally, 199 usable responses were obtained. The data were analysed through structural equation modelling and multi group analysis. The findings confirm the positive association between TQM and performance and clearly indicate that the form of this relationship is influenced by the different perceptions with regard to the exclusive/inclusive nature of talent. This study adds to the limited empirical evidence on talent-related issues and constitutes one of the very first attempts to explore the critical role of the human talent – a very innovative concept in the HRM literature – in influencing the way quality management efforts ultimately yield positive performance outcomes.

Keywords: talent; talent philosophies; total quality management; performance

1. Introduction

Modern business organisations operate in dynamic, complex and highly competitive business environments. In order to be able to compete effectively in the marketplace and successfully respond to the ever-changing customer needs and demands, total quality management (TQM) has emerged as a useful tool for managers that can assist their organisations in achieving continuous improvement (Dahlgaard & Dahlgaard-Park, 2006), attaining a strong competitive advantage (Jaeger & Adair, 2016) and gaining remarkable performance outcomes (Pantouvakis & Psomas, 2016). Although the positive relationship between TQM and company performance is well documented, empirical evidence is far from conclusive since the direct association among the two constructs can also be substantially influenced by a number of different contingencies that may refer either to dimensions of a company’s external environment (Wang, Chen, & Chen, 2012) or to internal organisational variables, such as the human resources. Specifically, the majority of scholars contend that the human factor is of paramount importance to the successful implementation of TQM and can substantially moderate the way TQM contributes to performance increases (Das, Kumar, & Kumar, 2011).

However, recent studies have begun to question the traditional view of human resource aspects as contributors to the successful implementation of TQM initiatives and now stress the need to focus on new and flexible human resource management (HRM) systems that

*Corresponding author. Email: angelos@pantouvakis.eu

emphasise employees' competences and unique skills, forcing thus organisations to orient their quality management systems into new ways of managing human resources (Pantouvakis & Psomas, 2016). In this vein, the recent HRM trends, which address the concept of human talent draw upon the above recommendations and provide an excellent basis to analyse how the introduction of novel human resource philosophies, which emphasise the talent notion, influences the way the dissemination of the TQM logic can boost the performance of business organisations.

In the field of HRM, the focus on talented people has become a prominent topic of discussion among scholars (Gallardo-Gallardo, Dries, & González-Cruz, 2013) and the literature has recognised the crucial role of high-performing or high-potential employees whose specific talents can contribute the most to the fulfilment of organisational goals (Collings & Mellahi, 2009). The various talent philosophies that are structured based on the assumptions about the underlying nature of talent (Meyers & van Woerkom, 2014) are also in line with trends in the literature which support the shift from the examination of isolated human resources practices and the focus on new employee strategies that are analysed under the spectrum of their underlying principles (Bou & Beltrán, 2005). These principles or philosophies constitute the underpinnings of human resource strategies and determine how people in an organisation are valued (Bou & Beltrán, 2005).

Taking into account the limited amount of empirical studies on talent issues (Meyers & van Woerkom, 2014) and the calls for examining the talent concept in practice (Collings & Mellahi, 2009) as well as following recommendations evident in the quality management literature regarding the need to focus on new employee management schemes (Pantouvakis & Psomas, 2016), this study aims to investigate the degree to which talent philosophies alter the way that TQM leads to performance gains.

2. Literature review and hypotheses development

2.1. Concept of talent in business organisations

The concept of talent has begun to attract both the academics' and practitioners' interest in the past few years, since the focus on talented employees and on their extraordinary, personal qualities and core competences creates a new route to organisational effectiveness, improves strategy execution and assists business organisations to gain a sustainable competitive advantage (Ashton & Morton, 2005). As a result, the emergence of this new and growing research field, which falls under the umbrella of HRM (Meyers, van Woerkom, & Dries, 2013), first of all is concerned with the need to provide a clear definition of what actually constitutes 'talent'.

In the literature, several attempts have been made to synthesise findings from other disciplines in order to best develop a definition or conceptualisation of talent in the context of business organisations. These research studies are far from conclusive with respect to defining the term 'talent' (Gallardo-Gallardo et al., 2013) and they follow different approaches in operationalising the talent construct. For instance, talent refers to the high-potential employees or the employees of strategic importance, who usually occupy key positions inside an organisation (Meyers & van Woerkom, 2014). However, according to Nijs, Gallardo-Gallardo, Dries, and Sels (2014), talent can be conceptualised as consisting of two components, namely ability and affective, which refer to

... systematically developed innate abilities of individuals that are deployed in activities they like, find important, and in which they want to invest energy. It enables individuals to perform excellently in one or more domains of human functioning, operationalized as

performing better than other individuals of the same age or experience, or as performing consistently at their personal best. (p. 182)

The concept of talent can also be indicative of highly educated individuals, who have the ability to achieve exceptional results in an organisation (Cooke, Saini, & Wang, 2014). Table 1 summarises some of the main talent definitions identified in the literature.

But which are the reasons that drive the organisations to identify or develop talented individuals? Nowadays, the need for talented people inside business organisations is accentuated by various global or macroeconomic trends, such as changing employee demographics, more complex financial and economic conditions or new types of business growth (Ashton & Morton, 2005). Moreover, the increasing mobility of employees and organisations and workforce diversity (Beechler & Woodward, 2009), as well as the emergence of knowledge-based economies and the development of new markets (Vaiman, Scullion, & Collings, 2012), also amplify the necessity to attract talented individuals.

In general, organisations that manage to identify and retain talented employees experience a significant number of economic and non-economic benefits at various individual,

Table 1. Selected talent definitions in the literature.

Focus on the characteristics of people	<p><i>‘Individuals who are special, have competencies valued by the company, behaviors aligned with the company’s values, are hard to find, are hard to replace, can add a great deal of value to the company, have options to leave at any time, and can help shape the future strategic directions of the company’</i></p> <p><i>‘Systematically developed innate abilities of individuals that are deployed in activities they like, find important, and in which they want to invest energy. It enables individuals to perform excellently in one or more domains of human functioning, operationalized as performing better than other individuals of the same age or experience, or as performing consistently at their personal best.’</i></p> <p><i>‘Competence x Commitment x Contribution’</i></p>	<p>Schuler (2015, p. 48)</p> <p>Nijs et al. (2014, p. 182)</p>
Focus on people	<p><i>‘Those who are highly educated and (have the ability to be) high achievers/performers in the organization’</i></p> <p><i>‘Those individuals who currently or have the potential to differentially contribute to firm performance by occupying strategic jobs’</i></p> <p><i>‘A euphemism for people’</i></p>	<p>Ulrich and Smallwood (2012, p. 60)</p> <p>Cooke et al. (2014, p. 234)</p> <p>Cappelli and Keller (2014, p. 309)</p> <p>Lewis and Heckman (2006, p. 141)</p>
Focus on both the characteristics of people and people	<p>Talent as natural ability, mastery, commitment to the work and the organisation, fit or Talent as high performers/high potentials or all employees</p>	<p>Gallardo-Gallardo et al. (2013)</p>

organisational and societal levels (Thunnissen, Boselie, & Fruytier, 2013). In fact, research studies have shown that managing talented people can have positive consequences and can influence various organisational variables either directly or through mediating effects (Collings & Mellahi, 2009). For example, the benefits arising from talent-related initiatives concern improvements in profitability, efficiency and effectiveness (Thunnissen et al., 2013) or productivity and flexibility (Schuler, 2015). Although the main goal of focusing on talented people is to increase company performance, positive outcomes in terms of employee satisfaction and career fulfilment (Schuler, 2015), competitiveness (Ashton & Morton, 2005) or sustainability (Boudreau & Ramstad, 2005) can also be produced.

2.1.1. *Exclusive versus inclusive talent philosophy*

There are various talent philosophies in the literature that are based on the underlying, critical assumptions about the nature of human talent and influence the perceptions about who can be regarded as a talented individual. One of the most frequently encountered tensions in the literature refers to the exclusive versus the inclusive talent philosophy (Meyers & van Woerkom, 2014) and the discussion focuses on whether all people have a specific talent (inclusive perception on talent) or whether some people are inherently more talented than other people (exclusive perception on talent) (Dries, 2013). According to the exclusive talent philosophy, some people have more value and potential than others and as a result the organisations should allot the greatest amount of resources to them (Stahl et al., 2012). These talented people receive a special treatment and are differentiated from their peers in the business environment since they are regarded as high potentials or high performers (Gallardo-Gallardo et al., 2013). They are employees of strategic importance (Meyers & van Woerkom, 2014), who are characterised by special and excellent competencies, occupy key positions and assist their organisations to the attainment of a sustainable competitive advantage (Collings & Mellahi, 2009).

On the other hand, other studies argue in favour of the inclusive nature of talent, which is built on the basic idea that everyone is talented and the focus should be on identifying and using the talents of all employees (Swales, Downs, & Orr, 2014). Advocates of the inclusive perception on talent encourage organisational practices that concern the needs of all employees (Stahl et al., 2012) and lead to the creation of a pleasant working environment (Dries, 2013). When the inclusive talent philosophy is adopted, organisations first recognise and accept that all employees have talents and then assign each individual in positions that give to each person the opportunity to use his or her talents (Swales et al., 2014). The inclusive talent philosophy receives the main criticism that it is not in fact distinct from the assumptions of the traditional HRM (Gallardo-Gallardo et al., 2013) or it may be unsustainable in practice (Sonnenberg, van Zijderveld, & Brinks, 2014). However, other authors demonstrate that the common practices of the traditional HRM do not cover a number of employees' aspects, which are the special focus of talent management, such as the identification of the specific talents and their deployment in the best jobs (Swales et al., 2014).

2.2. *General concept of TQM*

During the past years, the concept of TQM has received a great deal of academic attention worldwide, since various scholars have attempted to describe its concept and identify the unique TQM practices that can contribute to the achievement of different organisational goals. The importance of TQM is highly revealed through the increasing number of academic studies emerging especially after the early 1990s, in a time period when Dean and

Bowen (1994) viewed total quality as ‘as a philosophy or an approach to management that can be characterized by its principles, practices, and techniques’ (p. 394). In general, it is common perception that TQM pertains to a holistic management system aimed at achieving efficiency and continuous improvement (Dahlgaard-Park, Chen, Jang, & Dahlgaard, 2013), gaining a strong competitive advantage (El Shenawy, Baker, & Lemak, 2007) and ultimately moving towards business excellence.

Due to its importance, the philosophy of TQM has been extensively studied in the fields of manufacturing (Dubey & Gunasekaran, 2015) as well as service (Benavides-Velasco, Quintana-García, & Marchante-Lara, 2014) organisations and a lot of effort has been devoted towards revealing the underlying factors, practices or principles that most effectively describe the nature of TQM. It is worthwhile to note that the number and composition of TQM dimensions may differ across academic studies highlighting thus the complexity of the TQM concept. Most TQM theoretical models emphasise the importance of top management commitment and leadership (Das et al., 2011; Wiengarten, Fynes, Cheng, & Chavez, 2013), process management (Baird, Hu, & Reeve, 2011) as well as strategic partnerships and resources (Benavides-Velasco et al., 2014). Moreover, unique human resource aspects, such as employee training, rewarding and employee empowerment (Duh, Hsu, & Huang, 2012) or employee knowledge and education (Pantouvakis & Psomas, 2016), have also been identified as strong constituents of TQM. In their recent literature review, Hietschold, Reinhardt, and Gurtner (2014) developed a holistic set of 11 TQM critical success factors, which additionally involve customer focus, information and analysis, strategic quality planning, culture and communication, benchmarking and social and environmental responsibility.

2.3. TQM and performance

Apart from identifying the specific dimensions that describe the TQM concept, several authors have also pointed out the potential benefits that arise after the adoption of a TQM philosophy inside organisations. Although the successful implementation of the TQM concept has been associated with direct improvements in business innovativeness (Akgün, Ince, Imamoglu, Keskin, & Kocoglu, 2014), organisational learning (Lee & Lee, 2014) or knowledge management (Ooi, 2015), the vast amount of literature has focused on assessing the relationship between TQM and various aspects of company performance.

In fact, the direct and positive association between TQM and performance has been well-documented, since it has been proven that the former impacts the latter expressed either in financial or in non-financial terms (Dubey & Gunasekaran, 2015). Various studies have shown that fostering the TQM philosophy inside organisations leads to enhanced business results measured generally by customer, people, society and key performance criteria (Calvo-Mora, Ruiz-Moreno, Picón-Berjoyo, & Cauzo-Bottala, 2014). More specifically, the extent of TQM implementation has been linked with increases in operational performance (Baird et al., 2011), market performance (Lam, Lee, Ooi, & Lin, 2011), product quality and customer satisfaction and loyalty (Ng, Zhao, Fan, & Rungtusanatham, 2014). Certain financial gains, such as increases in sales or operating income, can also be realised through applying a TQM strategy inside business organisations (Boulter, Bendell, & Dahlgaard, 2013). Consequently, in order to confirm that TQM leads to performance, our first hypothesis is formulated as follows:

H1: Total Quality Management has a positive impact on performance.

2.4. Role of human talent philosophies in TQM–performance relationship

However, some authors argue that the implementation of TQM does not always lead directly to the intended organisational outcomes, but may be contingent upon several factors. On the one hand, these factors can include various external – outside the control of the firm – characteristics, such as the level of competition in the sector under examination or the market and technological turbulence (Wang et al., 2012). On the other hand, various authors have demonstrated that several internal variables can also moderate the relationship between undertaking TQM projects and company results. These variables that are unique to each business organisation can refer, *inter alia*, to the level of innovativeness (Wiengarten et al., 2013) or the firm's organisational structure (Douglas & Judge, 2001).

Most importantly, a significant number of studies highlighted the criticality of the human factor when examining the mechanism through which TQM leads to performance gains and demonstrated that the effectiveness of TQM increases when implemented along with the establishment of appropriate HRM strategies (Bou & Beltrán, 2005). Certain human resource practices, such as the careful recruitment and selection of people who possess behavioural traits aligned with the TQM philosophy (Ahmad & Schroeder, 2002), or the utilisation of extrinsic reward practices (i.e. employment security or profit sharing) (Allen & Kilmann, 2001) exhibit moderating effects in the relationship between TQM and organisational outputs. Moreover, other authors have focused on the unique competences of the human element and specifically those of leaders (Das et al., 2011) in order to investigate how the different levels of skills influence the TQM–performance relationship. Specifically, Das et al. (2011) supported that in the case of high leadership competencies, product quality is predicted by continuous improvement, customer focus, employee involvement and supplier quality management, whereas in the context of low leadership competencies the predictors of product quality are top management commitment, product innovation and customer focus. Finally, other studies deviated from the traditional human resource methods and evaluated the moderating role of certain behavioural characteristics, such as employee commitment or involvement with quality management objectives, proving, for instance, that a high-commitment management strategy has an interaction effect with TQM on a company's financial outcomes (Bou & Beltrán, 2005).

Thus, the critical, moderating role of the human element in determining the proper implementation of TQM initiatives inside business organisations is largely revealed. Although it is now recognised that organisations should concentrate their efforts in more flexible and innovative ways of managing their daily quality operations, putting an emphasis on their competent human capital (Pantouvakis & Psomas, 2016), no attempt has been made so far to examine how new employee concepts and specifically those which address talented employees or the different philosophies with regard to the nature of human talent moderate the relationship between TQM and performance.

These philosophies, which address talented individuals whose systematically developed innate abilities (Nijs et al., 2014) can be identified by the organisations and deployed in the right positions in order to contribute to the achievement of organisational goals (Collings & Mellahi, 2009), cannot be cultivated in management systems which are generally stringent and mechanistic in nature and restrict employee initiative and development (Kontoghiorghes, 2016); instead the philosophies of talent can be more effectively applied in organisations which are characterised by open and adaptive management systems, as well as encourage employee empowerment and personal involvement (Kontoghiorghes, 2016). The very nature of TQM seems to create the appropriate organisational

environment for talented people to deploy their unique and special skills and reach their highest potential.

However, even in organisational settings in which the talent philosophies can flourish, the different philosophies regarding talented individuals may significantly condition the TQM contribution to the achievement of improved performance results. The rationale behind this argument is built on the premise that the contradictory talent philosophies with regard to the differentiation among the exclusive and inclusive nature of human talent can play an important role on the formulation of a company's strategies and subsequently organisational outcomes. For example, in the case of the inclusive talent philosophy, the organisation's focus is not only on an elite subset of a population but on all employees (Swailles et al., 2014) and thus, every employee's talent is managed in order to deliver high performance (Iles, Chuai, & Preece, 2010). The organisation-wide diffusion of the TQM philosophy, which targets at achieving exceptional performance results through emphasising, *inter alia*, the involvement of all employees and supports everyone in the effort to create and share knowledge (Akgün et al., 2014) may lead to better performance results in an organisational environment, which gives everyone the opportunity to show their highest potential no matter what that may be (Ashton & Morton, 2005).

On the other hand, organisations, which are characterised by the prevalence of exclusive talent perceptions, develop certain practices which concern only a few employees, since the latter are regarded exceptional in terms of performance (Iles et al., 2010). These organisational attitudes may in turn instil a belief among the employees, who are not identified as talented, that they are not valued by their organisations, resulting possibly in their inability or unwillingness to follow a TQM strategy. As a result, it seems that the mechanism through which TQM yields positive performance outcomes may be considerably influenced by the presence of talent philosophies, with regard to the exclusive or inclusive nature of talent. Thus, our second hypothesis is formulated as follows:

H2: The different philosophies regarding the exclusive/inclusive nature of talent moderate the TQM–performance relationship.

The two hypotheses under examination are illustrated in [Figure 1](#).

3. Research methodology

3.1. Sample

A structured questionnaire was developed and distributed to shipping¹ companies located in Greece and operating globally and responses were collected mainly from the Quality

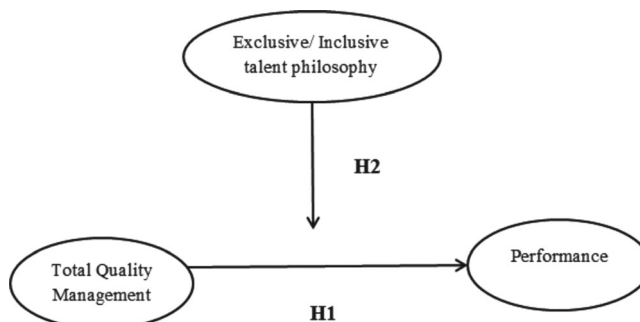


Figure 1. Hypotheses under examination.

and Safety managers. Finally, 199 usable responses were obtained. Of the companies, 43% operate in the dry bulk sector, 16% in the tanker sector, 3% own containerships and 38% operate various types of vessels. Furthermore, 60% of the companies regard themselves as medium-sized, 16% as small-sized, while 14% and 10% of the companies are large and extra-large, respectively. Finally, 53% of the shipping companies are ISO certified.

3.2. Measurement instruments

The exclusive/inclusive talent philosophy was measured using the instrument proposed by Dries, Cotton, Bagdadli, and de Oliveira (2014). The scale consisted of three items that measured the exclusive perception and three items that measured the inclusive perception on talent. In line with Dries et al. (2014), the latter items were reverse-scored, but following the results of a pre-pilot study of 20 managers in shipping companies, they were eliminated from further analysis, since they were found to produce confusing results possibly due to the fact that the rephrasing of the same idea resulted to boredom or fuzziness on behalf of the respondents, resulting thus in three items that measure the exclusive/inclusive talent philosophy. All items were measured on a seven-point Likert type scale (1 = strongly disagree, 7 = strongly agree).

The measurement instruments of the remaining constructs were adapted from previous studies on the relevant topics. The measurement instrument of TQM was adopted by the study of Pantouvakis and Psomas (2016), who evaluated the implementation of TQM in the context of the shipping industry. All items were measured on a seven-point Likert type scale (1 = strongly disagree, 7 = strongly agree). Shipping company performance was assessed using seven items; three of the items reflected customer satisfaction, whereas four items were used in order to measure service quality performance (adapted from Pantouvakis & Psomas, 2016; Psomas, Pantouvakis, & Kafetzopoulos, 2013). These dimensions were specifically selected as they have been also extensively used for performance evaluation in the shipping industry (i.e. Lun, Lai, Wong, & Cheng, 2014). Performance measurement items were measured on a subjective scale following contentions evident in the literature on their use (Panayides, 2003). The performance items were measured on a seven-point Likert type scale (1 = minimum level, 7 = maximum level).

3.3. Methodology

The structure of the exclusive/inclusive talent philosophy was determined through exploratory factor analysis (EFA). Since there are hardly any empirical studies that investigate the pattern of the talent perceptions, EFA was chosen in order to identify the underlying factors of the variables that comprise the talent construct (Hair, Black, Babin, Anderson, & Tatham, 2006). Confirmatory factor analyses (CFA) were utilised to refine the scales of TQM and performance, as the measurement instruments of these constructs have been widely used in the literature and their applicability has been confirmed by various researchers (e.g. Pantouvakis & Psomas, 2016; Psomas et al., 2013). In order to evaluate the TQM–performance relationship and to examine the moderating effect of talent perceptions on this association, structural equation modelling and multi group analysis were employed.

4. Results and discussion

4.1. Exploratory factor analysis of the exclusive/inclusive talent philosophy

EFA was applied in the three items of the exclusive/inclusive talent philosophy using the method of principal component analysis (PCA) to yield the factors and a varimax rotation

to improve the interpretation. The EFA resulted in one factor which explains 54.126% of the total variance, while the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy is 0.615, which is acceptable according to Hair et al. (2006). Table 2 displays the respective factor loadings.

The extracted factor describes the exclusive/inclusive talent perceptions and includes statements, such as ‘A talent is not something everyone possesses, but just the lucky few.’ According to the fundamentals of the exclusive talent philosophy, the three items, which comprise the exclusive/inclusive talent philosophy, reveal the narrow view of talent that considers only a selective group of employees as talented. In order to test the second hypothesis (Section 2.4), the summated scale of the three items measuring the belief of the exclusive/inclusive nature of talent was calculated and a higher score on that scale indicates a more exclusive perception on talent. After excluding the median value of the scale, two categories were formulated in order to reflect the inclusive and the exclusive talent philosophies.

4.2. Confirmatory factor analyses

CFA were conducted to refine the constructs under examination using the Maximum Likelihood Estimation. The Cronbach’s alpha value for TQM equals 0.923, while the corresponding value for performance is 0.928, denoting very satisfactory levels of construct reliabilities. The standardised regression weights of the measurement items on the first-order factors for both the TQM and performance constructs were statistically significant ($p < .05$) and greater than 0.5, confirming the convergent validity of the measurement models.

The CFA of TQM revealed three dimensions, namely top management commitment, employee quality management and employee knowledge and education, and produced a good fit (chi-square = 87.198, $p = .000$, chi-square/df = 2.127, GFI = 0.931, AGFI = 0.889, NFI = 0.896, CFI = 0.941, RMSEA = 0.075) with standardised residual covariances below the limit of 2.5 (Hair et al., 2006). The first dimension of TQM (top management commitment) emphasises the critical role of senior executives in developing a total quality philosophy inside their organisations, as well as their active participation and commitment to all quality improvement efforts. The second dimension of TQM (employee quality management) focuses on the crucial role of the human capital, since employees should be encouraged to take initiatives and be motivated to constantly improve their performance. Last but not the least, it is obvious that employee knowledge and education are integral components of the TQM philosophy. Thus, the third dimension of TQM incorporates this notion and signifies the essential presence of educational programmes that assist employees in upgrading their knowledge and know-how.

Moreover, the CFA of performance revealed two dimensions (service quality performance and customer satisfaction), while the good measurement properties of the instrument

Table 2. Exploratory factor analysis of the exclusive/inclusive talent philosophy.

KMO measure of sampling adequacy = 0.615 Total variance explained = 54.126%	Factor 1
A talent is a special individual that can make a significant difference to a company.	0.777
A talent is not something everyone possesses, but just the lucky few.	0.758
It is a logical choice that developmental assignments and resources are only invested in the most promising talent.	0.667

were also confirmed (chi-square = 22.639, $p = .031$, chi-square/df = 1.887, GFI = 0.969, AGFI = 0.929, NFI = 0.982, CFI = 0.992., RMSEA = 0.067). All standardised residual covariances were also below the acceptable limits of 2.5 (Hair et al., 2006). The results showed that performance can be conceptualised as consisting of two components, namely service quality performance and customer satisfaction. The service quality performance is characterised by a number of very important attributes especially when examining the context of the shipping industry. These attributes include for example the conformance of the services to customer specifications and the on time service provision both of which are considered extremely indicative of the successful operation of shipping services. On the other hand, the features of customer satisfaction and loyalty are included in the second aspect of the performance construct (customer satisfaction).

4.3. Hypotheses testing

Structural equation modelling was then used to validate the TQM–performance relationship (H1). In order to estimate the parameters of the model, the maximum likelihood method and covariance matrix were used. We treated the TQM and the performance as second-order constructs. The structural model (Figure 2) exhibits a good fit, with fit indices of chi-square = 210.478, df = 128, $p = .000$, CFI = 0.960, GFI = 0.900, AGFI = 0.866, NFI = 0.906, RMSEA = 0.057, fulfilling the respective acceptable thresholds, while the standardised residual covariances were also below the acceptable limits. The results reveal that TQM positively and significantly influences company performance, thus supporting our first hypothesis ($b = 0.397$, $p = .000$, $R^2 = .157$). This finding is in line with previous studies in the literature (Jaeger & Adair, 2016), which highlight the significant benefits that arise from developing and implementing a TQM strategy in terms of positive organisational results.

In order to test for the moderating effect of the different philosophies regarding the exclusive/inclusive nature of talent, Multi Group Analysis was employed. The results revealed an increase in the chi-square/df ratio from 2.455 to 2.793 as the first constrained was imposed. This led us to conclude that the exclusive/inclusive talent perceptions moderate the link between TQM and performance (Table 3), thus confirming our second hypothesis.

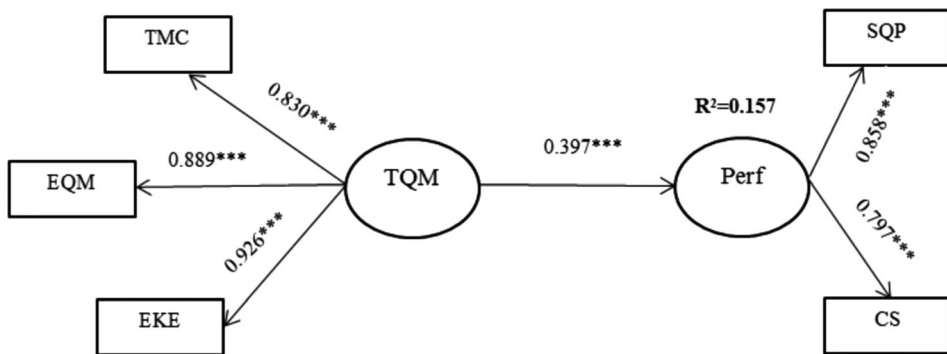


Figure 2. Results of SEM analysis. TQM: total quality management, TMC: top management commitment, EQM: employee quality management, EKE: employee knowledge and education, Perf: performance, SQP: service quality performance, CS: customer satisfaction. ***Significant at the 0.01 level.

Table 3. Results for the moderating effect of the inclusive/exclusive talent philosophy.

	Inclusive ($n = 93$)		Exclusive ($n = 84$)	
	b	R^2	b	R^2
TQM \rightarrow performance	0.576***	.332	0.167 (n.s.)	.028

***Significant at the 0.01 level.

Table 3 provides some interesting results with respect to the moderating role of talent philosophies in the relationship between TQM and company performance. When talent is perceived as being an inclusive construct, it seems that TQM leads positively and significantly to performance ($b = 0.576$, $R^2 = .332$). However, as far as the results for the exclusive talent philosophy are concerned, it is obvious that TQM fails to produce positive or meaningful performance outcomes ($R^2 = .028$). This may be appointed to a number of reasons. The first reason may be problems connected with the questionnaire itself, or the data collection. However, the results from reliability analysis confirm that the data stand as collected and lead us to reject this assumption. The second reason may be owed to the possibility of existence of a *non-linear relationship* between 'TQM' and 'company performance' for the case of companies employing 'exclusively talented employees'. Following this, additional statistical analyses were carried out, but no nonlinear (e.g. logarithmic, quadratic, exponential) relationship was revealed.

Overall, these findings provide important insights into how the different perceptions regarding talented individuals condition the successful implementation of TQM inside business organisations and suggest that there is a positive association between TQM and performance when talent is viewed as being an inclusive entity.

The above findings are likely to be related to the positive implications that the inclusive philosophy has when compared to the exclusive philosophy. The inclusive talent philosophy sees everyone as talented, recognises that everyone inside an organisation is valuable and does not promote the use of discriminatory practices among the workforce (Swailles et al., 2014). Since the talent of every individual is identified and used in the most suitable roles in the organisation, all employees feel that they can make a difference and thus are willing to give the best of themselves (Meyers et al., 2013) in their effort to contribute to the achievement of organisational goals. As a consequence, everyone is engaged in executing the management plans or the company's quality management strategies in the most effective manner and it is therefore possibly that under these circumstances TQM can contribute to the achievement of high levels of performance.

On the other hand, if talent is perceived as being mainly exclusive and managers focus their attention only to a small subset of their employees by investing a larger amount of resources for their development (Dries, 2013), they may finally create an organisational environment in which the 'non-talented' employees are occupied by negative feelings or dissatisfaction (Gallardo-Gallardo et al., 2013) and there are limited learning opportunities for everyone, difficulties in knowledge transfer and an absence of teamwork (Pfeffer, 2001). A management system, like TQM, which generally is built on collaborative spirit and everyone's participation and involvement, may not be applied successfully to organisational settings that have the characteristics described before.

5. Conclusions

It is now generally acknowledged that the competent human capital plays the most decisive role in the successful implementation of any quality management effort inside business organisations. In order for any TQM programme to be effectively executed and lead to performance benefits, companies should focus on motivating and empowering their employees as well as on taking new approaches to HRM. Thus, this study constitutes one of the very first attempts in the literature to empirically assess the applicability of novel talent philosophies and their quality management implications for organisations. Specifically, after confirming the positive association between TQM and performance, this study aimed to investigate the role of talent philosophies, with regard to the exclusive or inclusive nature of talent, in the way that TQM affects a company's outcomes, in terms of service quality performance and customer satisfaction.

The study findings, first of all, reveal that TQM has a positive and significant influence on company performance. Furthermore, the results support the idea that talent perceptions moderate the relationship between TQM and performance. More specifically, it has been shown that in the case in which talent is perceived as being merely an inclusive entity, the implementation of TQM exerts a positive and significant effect on company performance. In contrast, when the exclusive talent philosophy is adopted, the results clearly indicate the absence of such an association. Thus, it seems that adopting a TQM philosophy can be translated into performance gains, when all employees of an organisation are regarded as being talented or as possessing unique capabilities and potential to contribute to the attainment of organisational goals. Each employee should therefore be assisted and encouraged to discover his/her own specific talent and to acquire the necessary skills and knowledge that will turn these talents into performance (Buckingham & Vosburgh, 2001). By perceiving only a small segment of an organisation's human capital as being talented (exclusive talent philosophy) and treating them in a differential way may not eventually lead to the successful implementation of quality management efforts. In terms of direction for future research, further work should focus on the role of the exclusive talent approach on the TQM performance relationship as well as to examine the role of other talent philosophies, such as the innate/developable perceptions on talent (Meyers et al., 2013), and how they condition the relationship among various quality management systems, as implemented by the organisations, and company outcomes.

Disclosure statement

No potential conflict of interest was reported by the authors.

Note

1. 'Shipping' and 'maritime' are to be used interchangeably in this work, both meaning companies involved in maritime operations and transfer of goods by the sea.

References

- Ahmad, S., & Schroeder, R. G. (2002). The importance of recruitment and selection process for sustainability of total quality management. *International Journal of Quality & Reliability Management*, 19(5), 540–550.
- Akgün, A. E., Ince, H., Imamoglu, S. Z., Keskin, H., & Kocoglu, İ. (2014). The mediator role of learning capability and business innovativeness between total quality management and financial performance. *International Journal of Production Research*, 52(3), 888–901.

- Allen, R. S., & Kilmann, R. H. (2001). The role of the reward system for a total quality management based strategy. *Journal of Organizational Change Management*, 14(2), 110–131.
- Ashton, C., & Morton, L. (2005). Managing talent for competitive advantage: Taking a systemic approach to talent management. *Strategic HR Review*, 4(5), 28–31.
- Baird, K., Hu, K. J., & Reeve, R. (2011). The relationships between organizational culture, total quality management practices and operational performance. *International Journal of Operations & Production Management*, 31(7), 789–814.
- Beechler, S., & Woodward, I. C. (2009). The global “war for talent”. *Journal of International Management*, 15(3), 273–285.
- Benavides-Velasco, C. A., Quintana-García, C., & Marchante-Lara, M. (2014). Total quality management, corporate social responsibility and performance in the hotel industry. *International Journal of Hospitality Management*, 41, 77–87.
- Bou, J. C., & Beltrán, I. (2005). Total quality management, high-commitment human resource strategy and firm performance: An empirical study. *Total Quality Management & Business Excellence*, 16(1), 71–86.
- Boudreau, J. W., & Ramstad, P. M. (2005). Talentship, talent segmentation, and sustainability: A new HR decision science paradigm for a new strategy definition. *Human Resource Management*, 44(2), 129–136.
- Boulter, L., Bendell, T., & 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*, 33(2), 197–215.
- Buckingham, M., & Vosburgh, R. M. (2001). The 21st century human resources function: It’s the talent, stupid! *Human Resource Planning*, 24(4), 17–23.
- Calvo-Mora, A., Ruiz-Moreno, C., Picón-Berjoyo, A., & Cauzo-Bottala, L. (2014). Mediation effect of TQM technical factors in excellence management systems. *Journal of Business Research*, 67, 769–774.
- Cappelli, P., & Keller, J. R. (2014). Talent management: Conceptual approaches and practical challenges. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 305–331.
- Collings, D. G., & Mellahi, K. (2009). Strategic talent management: A review and research agenda. *Human Resource Management Review*, 19(4), 304–313.
- Cooke, F. L., Saini, D. S., & Wang, J. (2014). Talent management in China and India: A comparison of management perceptions and human resource practices. *Journal of World Business*, 49(2), 225–235.
- Dahlgaard-Park, S. M., Chen, C. K., Jang, J. Y., & Dahlgaard, J. J. (2013). Diagnosing and prognosticating the quality movement – a review on the 25 years quality literature (1987–2011). *Total Quality Management & Business Excellence*, 24(1–2), 1–18.
- Dahlgaard, J. J., & Dahlgaard-Park, S. M. (2006). Lean production, six sigma quality, TQM and company culture. *The TQM Magazine*, 18(3), 263–281.
- Das, A., Kumar, V., & Kumar, U. (2011). The role of leadership competencies for implementing TQM: An empirical study in Thai manufacturing industry. *International Journal of Quality & Reliability Management*, 28(2), 195–219.
- Dean, J. W., & Bowen, D. E. (1994). Management theory and total quality: Improving research and practice through theory development. *Academy of Management Review*, 19(3), 392–418.
- Douglas, T. J., & Judge, W. Q. (2001). Total quality management implementation and competitive advantage: The role of structural control and exploration. *Academy of Management Journal*, 44(1), 158–169.
- Dries, N. (2013). The psychology of talent management: A review and research agenda. *Human Resource Management Review*, 23(4), 272–285.
- Dries, N., Cotton, R. D., Bagdadli, S., & de Oliveira, M. Z. (2014). HR directors’ understanding of talent’: A cross-cultural study. In A. Al Ariss (Ed.), *Global talent management: Challenges, strategies, and opportunities* (pp. 15–28). Switzerland: Springer International Publishing.
- Dubey, R., & Gunasekaran, A. (2015). Exploring soft TQM dimensions and their impact on firm performance: Some exploratory empirical results. *International Journal of Production Research*, 53(2), 371–382.
- Duh, R. R., Hsu, A. W. H., & Huang, P. W. (2012). Determinants and performance effect of TQM practices: An integrated model approach. *Total Quality Management & Business Excellence*, 23(5–6), 689–701.

- El Shenawy, E., Baker, T., & Lemak, D. J. (2007). A meta-analysis of the effect of TQM on competitive advantage. *International Journal of Quality & Reliability Management*, 24(5), 442–471.
- Gallardo-Gallardo, E., Dries, N., & González-Cruz, T. F. (2013). What is the meaning of ‘talent’ in the world of work? *Human Resource Management Review*, 23(4), 290–300.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hietschold, N., Reinhardt, R., & Gurtner, S. (2014). Measuring critical success factors of TQM implementation successfully—a systematic literature review. *International Journal of Production Research*, 52(21), 6254–6272.
- Iles, P., Chuai, X., & Preece, D. (2010). Talent management and HRM in multinational companies in Beijing: Definitions, differences and drivers. *Journal of World Business*, 45(2), 179–189.
- Jaeger, M., & Adair, D. (2016). Perception of TQM benefits, practices and obstacles: The case of project managers and quality management representatives in Kuwait. *The TQM Journal*, 28(2), 317–336.
- Kontoghiorghes, C. (2016). Linking high performance organizational culture and talent management: Satisfaction/motivation and organizational commitment as mediators. *The International Journal of Human Resource Management*, 27(16), 1833–1853.
- Lam, S. Y., Lee, V. H., Ooi, K. B., & Lin, B. (2011). The relationship between TQM, learning orientation and market performance in service organisations: An empirical analysis. *Total Quality Management & Business Excellence*, 22(12), 1277–1297.
- Lee, H. H., & Lee, C. Y. (2014). The effects of total quality management and organisational learning on business performance: Evidence from Taiwanese insurance industries. *Total Quality Management & Business Excellence*, 25(9–10), 1072–1087.
- Lewis, R. E., & Heckman, R. J. (2006). Talent management: A critical review. *Human Resource Management Review*, 16(2), 139–154.
- Lun, Y. V., Lai, K. H., Wong, C. W. Y., & Cheng, T. C. E. (2014). Green shipping practices and firm performance. *Maritime Policy & Management*, 41(2), 134–148.
- Meyers, M. C., & van Woerkom, M. (2014). The influence of underlying philosophies on talent management: Theory, implications for practice, and research agenda. *Journal of World Business*, 49(2), 192–203.
- Meyers, M. C., van Woerkom, M., & Dries, N. (2013). Talent—Innate or acquired? Theoretical considerations and their implications for talent management. *Human Resource Management Review*, 23(4), 305–321.
- Ng, S. C. H., Zhao, X., Fan, X., & Rungtusanatham, J. M. (2014). TQM and brand-building by Chinese original brand manufacturers: Impact on business performance. *International Journal of Production Research*, 52(3), 825–846.
- Nijs, S., Gallardo-Gallardo, E., Dries, N., & Sels, L. (2014). A multidisciplinary review into the definition, operationalization, and measurement of talent. *Journal of World Business*, 49(2), 180–191.
- Ooi, K. B. (2015). TQM practices and knowledge management: A multi-group analysis of constructs and structural invariance between the manufacturing and service sectors. *Total Quality Management & Business Excellence*, 26(11–12), 1131–1145.
- Panayides, P. M. (2003). Competitive strategies and organizational performance in ship management. *Maritime Policy & Management*, 30(2), 123–140.
- Pantouvakis, A., & Psomas, E. (2016). Exploring total quality management applications under uncertainty: A research agenda for the shipping industry. *Maritime Economics & Logistics*, 18(4), 496–512.
- Pfeffer, J. (2001). Fighting the war for talent is hazardous to your organization’s health. *Organizational Dynamics*, 29(4), 248–259.
- Psomas, E. L., Pantouvakis, A., & Kafetzopoulos, D. P. (2013). The impact of ISO 9001 effectiveness on the performance of service companies. *Managing Service Quality*, 23(2), 149–164.
- Schuler, R. S. (2015). The 5-C framework for managing talent. *Organizational Dynamics*, 44(1), 47–56.
- Sonnenberg, M., van Zijderveld, V., & Brinks, M. (2014). The role of talent-perception incongruence in effective talent management. *Journal of World Business*, 49(2), 272–280.
- Stahl, G., Björkman, I., Farndale, E., Morris, S. S., Paauwe, J., Stiles, P., ... Wright, P. (2012). Six principles of effective global talent management. *Sloan Management Review*, 53(2), 25–42.

- Swales, S., Downs, Y., & Orr, K. (2014). Conceptualising inclusive talent management: Potential, possibilities and practicalities. *Human Resource Development International*, 17(5), 529–544.
- Thunnissen, M., Boselie, P., & Fruytier, B. (2013). Talent management and the relevance of context: Towards a pluralistic approach. *Human Resource Management Review*, 23(4), 326–336.
- Ulrich, D., & Smallwood, N. (2012). What is talent? *Leader to Leader*, 63, 55–61.
- Vaiman, V., Scullion, H., & Collings, D. (2012). Talent management decision making. *Management Decision*, 50(5), 925–941.
- Wang, C. H., Chen, K. Y., & Chen, S. C. (2012). Total quality management, market orientation and hotel performance: The moderating effects of external environmental factors. *International Journal of Hospitality Management*, 31(1), 119–129.
- Wiengarten, F., Fynes, B., Cheng, E. T. C., & Chavez, R. (2013). Taking an innovative approach to quality practices: Exploring the importance of a company's innovativeness on the success of TQM practices. *International Journal of Production Research*, 51(10), 3055–3074.