

The myth of a direct relationship between organizational culture and TQM

Haffar, Mohamed; Al-hyari, Khalil Ahmad; Djebarni, Ramdane; Al-shamali, Ahmed; Abdul Aziz, Muhammad; Al-shamali, Sarah

DOI:

[10.1108/TQM-06-2020-0138](https://doi.org/10.1108/TQM-06-2020-0138)

License:

Creative Commons: Attribution-NonCommercial (CC BY-NC)

Document Version

Peer reviewed version

Citation for published version (Harvard):

Haffar, M, Al-hyari, KA, Djebarni, R, Al-shamali, A, Abdul Aziz, M & Al-shamali, S 2021, 'The myth of a direct relationship between organizational culture and TQM: propositions and challenges for research', *TQM Journal*. <https://doi.org/10.1108/TQM-06-2020-0138>

[Link to publication on Research at Birmingham portal](#)

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.

The myth of a direct relationship between organizational culture and TQM: propositions and challenges for research

Purpose - This paper aims to report the results of a comprehensive literature review concerned with exploring the distinctive roles of the underlying multidimensional psychological mechanisms through which organizational culture affects TQM.

Design/methodology/approach – A thorough review of the relevant existing studies focusing on the direct and indirect links between organizational culture (OC), employee readiness for change (ERFC), employee commitment to change (ECC), and TQM implementation was conducted. To identify studies to include in our review, electronic searches of prominent databases and journals were carried out for the period 1980 to 2020.

Findings – The thorough analysis of relevant indicates that various types of OC influence TQM through certain psychological mechanisms namely employee readiness for change dimensions and employee affective commitment to change. Therefore, the paper develops a set of propositions and a novel integrative conceptual framework to explain the mediating roles of ERFCs and EACC in the OC- TQM relationship, and then concludes by suggesting future lines of research and highlighting practical managerial implications.

Originality/value – Drawing on academic perspectives from multiple literature streams, this study offers a more advanced understanding of the relationship between organizational culture and TQM implementation via exploring multiple mediating paths.

Keywords, Employee readiness for change, commitment to change, Organizational culture, TQM

Paper type Conceptual Paper

Introduction

Organizations operating in the ever-growing global marketplace are under intense pressure to adapt to various operational changes in order to sustain their operational excellence and enhance their competitive edge (Van der Wiele et al., 2011; Fundin et al., 2018). Total Quality Management (TQM) initiative is a change approach that supplements other change initiatives in helping organizations to accomplish sustainable competitive advantage in today's era of a global competitive marketplace (Lee et al., 2012; Heine et al., 2016; Sahoo, 2019). Notwithstanding that quality management became popular in the 1980s and 1990s, many organizations that adopted TQM are still struggling with serious and rather chronic challenges of quality that have unavoidably exacerbated poor quality, which results in substantial profit reductions (Srinivasan and Kurey, 2014; Hietschold et al., 2014). In response to the crucial degree of failure in quality management implementation stated by organizations worldwide, researchers have conducted many studies to identify various critical individual and contextual issues contributing to the success or failure of TQM execution (Hietschold et al., 2014; Tenji and Foley, 2019).

The interest in the relationship between organizational culture (OC), as one of the most important contextual factors, and TQM implementation dates back to the 1990s (e.g., Detert et al. 2000; Al-Kalifa and Aspinwall, 2001; Zu et al., 2011; Dellana and Hauser, 1999; Chang and Wiebe, 1996), and has flourished since then. In the existing literature of TQM, several studies like Gimenez-Espin et al. (2013), Panuwatwanich and Nguyen (2017) and Zu et al. (2010) have investigated the effect of different organizational culture types on TQM implementations. Despite these efforts, the search for an enriched comprehension of the relationship between organizational culture and TQM continues.

A thorough literature review indicates that it is a high time to move beyond the examination of the direct effect of OC on TQM and move towards a deeper understanding of the mechanism through which OC come to have an influence on TQM. In line with this, there have been important calls for more integration between TQM and other relevant streams of research such as organizational behavior and organizational change. Drawing on academic perspectives from several literature streams, this study offers a more advanced comprehension of the relationship between organizational culture and TQM implementation via exploring multiple mediating paths. An inclusive review of the literature implies that organizational culture may impact TQM indirectly via its influence on employee readiness for change (ERFC) and employee commitment to change (ECC). Nonetheless, the studies on the indirect impact of OC on TQM implementation by ERFC and ECC are scarce.

In light of empirical advancement, and to address the research gaps identified above, our paper aims to develop an integrated conceptual framework and associated propositions, based on an integrative literature review method, which is “a form of research that reviews, critiques, and synthesizes representative literature on a topic in an integrated way” (Torraco, 2005, p. 356). **In doing so, the following objectives were set:**

- (i) **To refine the existing understanding of the organizational culture - TQM relationship via exploring multiple mediating paths,**
- (ii) **To identify appropriate propositions worthy of investigation and a novel integrated framework on which to build future streams of research and initiate the “recurring cycle” of theory building as Lyntham (2000) puts it, thus intensifying the knowledge base of practitioners and researchers interested in the topic.**

Background

Total Quality Management

TQM is a change effort and one of the most significant recent developments of management practices (Dahlggaard-Park et al., 2018). Several quality experts and authors consider TQM practices and principles to be universally appropriate to any organization (Deming, 1986; Juran, 1988), irrespective of organizational circumstantial factors such as external environment, culture, technology and size (Zhao et al., 2004). Despite the clear advantages that TQM brings to any organization (Anil and Satish, 2019), the literature is abundant with research studies that reported serious failures in TQM in cases as well as teething issues while employing TQM practices in other cases because of various hindrances to TQM implementation (Sila, 2007).

In this vein, there is a growing debate as to whether TQM is universal or contingent (Soltani et al., 2005). According to Zhao et al., (2004) contingency theory encounters the universal adaptation of TQM and maintains that a successful implementation of TQM depends on the organizational context. Authors such as Sadikoqlu and Zeihr (2008) and Zhao et al. (2004) argued that organizations are heterogeneous entities with different organizational contexts. Thus, such heterogeneity yields differential levels of performance.

Whereas TQM can be universally applicable to any organization, the success levels of the implementation are context-bound as claimed by Sadikoqlu and Zeihr (2008). Therefore, many authors such as Soussa and Voss (2002) posit that TQM can be situated within the contingent approach of management theory.

The critical role of employees on organizational change

The latest change management literature has documented that organizational members together form the building blocks of a successful organizational change (Holt et al., 2007; Jones et al., 2005). Nevertheless, most of the previous studies in the field of organizational change (*cf.* Armenakis and Bedeian, 1999; Porras and Silvers, 1991) stressed how organizations readied, introduced, applied, or reacted to organizational change. However, numerous academics have recently examined the topic from a micro level and focused on the role played by human factors in executing strategic changes (Choi and Ruona, 2011; Holt et al., 2007; Jones et al., 2005; Sonenshein and Dholakia, 2011). Several contemporary papers have emphasized the significant impact of employee commitment to change (Herold et al., 2007; Neubert and Cady, 2001; Shum et al., 2008), employee readiness for change (Jones et al., 2005; Holt et al., 2007) in the organizational change process.

ERFC is grounded in the concept of unfreezing, developed by Kurt Lewin (Choi and Ruona, 2011). The most broadly quoted definition of employee's readiness for change was introduced by Armenakis et al. (1993) who described readiness for change as an individual's "beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully undertake those changes" (p. 681). Though the ERFC definitions vary from researcher to researcher, the literature indicates that numerous definitions have been taken from the original work of Armenakis et al. (see Table 1).

Although the work of Jones et al. (2005) and Armenakis et al. (1993) suggested that ERFC is one dimensional construct, Holt et al. (2007) argued that the ERFC is multidimensional construct comprised of four key components; namely, appropriateness of change, support of management for change, personal benefit of the change and efficacy of the change.

Insert Table 1 here

Employee commitment to change

Scholars in the field of change management have focused on the significance of creating employee commitment to change (ECC) to enhance change implementation success probability (Neubert and Cady, 2001; Meyer et al., 2002; Herold et al., 2007). A three-dimensional conceptualization of ECC, as an improvement on the unidimensional approach of the other models, was developed by Herscovitch and Meyer (2002). This multidimensional model of ECC is based on the general theory of workplace commitment that is derived from the work of Meyer and Herscovitch's (2001). They conceptualized ECC as "a mindset that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative". Drawing on this, this mindset "can reflect (a) a desire to provide support for the change based on a belief in its inherent benefits (affective commitment to the change), (b) a recognition that there are costs associated with failure to provide support for the change (continuance commitment to the change), and (c) a sense of obligation to provide support for the change (normative commitment to the change)" (Herscovitch and Meyer, 2002, p. 475).

Methods

The authors followed the methodology of literature review in the social sciences and management field as advocated by Pettigrew and Roberts (2005) and Tranfield et al. (2003). We conducted a thorough review of the relevant existing studies concentrating on the direct and indirect relationship between organizational culture, ERFC, ECC and TQM implementation.

To identify studies to be included in our review, a comprehensive electronic search of prominent databases and journals was carried out. The databases searched were SpringerLink,

Emerald, PsychInfo, Business Source Premier, Taylor & Francis, JSTOR, Scopus, EBSCOhost, Social Sciences Citation Index, ScienceDirect, and Elsevier. This review intentionally concentrated on articles published in top-ranked peer-reviewed management journals written in English, such as the *TQM journal*, *British Journal of Management*, *Journal of Operations Management*, *Journal of Applied Psychology*, *Human Resource Management Review*, *Academy of Management Review*, *Journal of Organizational Behavior*, *International Journal of Production Economics*, *International Journal of Operations and Production Management*, *Human Resource Development Review*, *Organization Science*, *Journal of Organizational Change Management*, *Total Quality Management and Business Excellence*. Textbooks, conferences proceedings and trade magazines and non-English sources were excluded from our search.

We limited the search period to 1980–2020, with exceptions for prominent texts that pre-date 1980. The authors selected this period because of the explosion of interest in recent years has produced most of the relevant literature on TQM, organizational culture and employee readiness and commitment to change being written during this period. We undertook keyword searches based on the established guidelines for identifying appropriate articles (e.g., Petticrew and Roberts, 2005; Tranfield et al., 2003). More specifically, we searched for studies that combined two or more of the following keywords: *total quality management*, *corporate culture*, *organizational culture*, *resistance to change*, *organizational change*, *willingness to change*, *commitment to change*, *openness to change*, *attitudes toward change*, and *employee readiness for change*.

The initial database and journal searches produced a list of 303 initial references. The list was reduced based on the following inclusion and exclusion criteria.

- We excluded papers that are published prior to 1980, (e.g., Helmich and Brown, 1972).
- We excluded papers that merely mention one of the main factors in our study (e.g., Belkhamza, and Azizi Wafa, 2014)
- We only included papers which indicate a substantial link between two or more of the key concepts (organizational culture, TQM, commitment to change and readiness for change). For example, Bou-Llusar et al. (2009) and Corredor & Goñi (2011) papers were excluded as they focus on the relationship between TQM and performance.
- The focus was on studies that examined the influence of organizational culture as an independent variable on ERFC, EACC and TQM implementation. Thus, we did not include studies that considered organizational culture as a dependent variable influenced by TQM implementation (e.g., Jenner et al., 1998).

As a result, 104 articles, which met the basic criteria of relevance and quality, were put forward to the next phase. The next stage in the process was to read the full text of articles in the remaining corpus. We carefully scrutinized these articles one by one. Another set of papers were screened out from our pool after reading them entirely as the full text made it clear that they were not relevant to the review question. Table 2 summarizes the key reviewed articles on the relationship between the key research constructs showing data setting (countries), organizations, and key findings. Some of these studies were designed principally to investigate other topics, yet included correlations between organizational culture, TQM, employee readiness and commitment to change. Thus, only major findings that relate to the key constructs are included.

Insert Table 2 here

Conceptual framework and research propositions

The direct influence of organizational culture on TQM implementation

Recent literature on TQM suggested that there is a growing acknowledgement of the impact of OC on the failure or success of TQM implementations (Baird et al., 2011; Zu et al., 2010). Several authors have studied the impact of the four culture types of CVF model and its matched scale (OCAI) on TQM (e.g., Gimenez-Espin et al., 2013; Prajogo and McDermott, 2005). This is due to the significance of this model in diagnosing its culture and determining the required changes to enhance productivity (Cameron & Quinn, 1999; Gimenez-Espin et al., 2013). This model offers four types of organizational culture namely adhocracy culture, group culture, market culture and hierarchy culture. Organizational economics theory underpins the Market culture (Cameron & Quinn, 1999). The Market culture type assumes that the external environment is hostile and requires the organization to compete fiercely so that it can improve its position and grow (Shafritz et al., 2011). The roots of Clan culture stem from the human resource theory emphasizing the human dynamics of organizations (Cameron & Quinn, 2011). According to Cameron et al. (2006), “organizations succeed because they hire, develop, and retain their human resource base” (p. 38). Managers here focus on empowering employees and empower them to develop their skills to have a successful organization (Hartnell et al., 2011). The adhocracy culture, underpinned by open-systems theories, focuses on organizational interaction with its external environment (Shafritz et al., 2011). Such culture makes up a creative environment that promotes entrepreneurship,

innovation, and creative approaches to meet challenges and remain competitive (Hartnell et al., 2011).

The findings of the majority of the above studies suggest that TQM practices are connected with different organizational culture types (Gimenez-Espin et al., 2013; Prajogo and McDermott, 2005), though, group and adhocracy culture types are the most supportive for the implementation of TQM (Al-Khalifa and Aspinwall, 2001; Chang and Wiebe, 1996; Dellana and Hauser, 1994; Gimenez-Espin et al., 2013). As a case in a point, Gimenez-Espin et al. (2013) used hierarchical regression analysis to test the impact of organizational culture types on TQM implementation in Spanish organizations. The regression coefficient indicated that adhocracy culture ($\beta = 0.242$, $p < 0.01$) has a positive impact, while, both market culture ($\beta = -0.118$, $p < 0.05$) and hierarchy culture (-0.087 , $p < 0.10$) have a significant negative impact on TQM implementation. Gözükarar et al. (2019) examined the link between adhocracy culture and TQM in Turkish healthcare organizations using structural equation modelling. The path coefficient from adhocracy culture to TQM ($\beta = 0.55$, $p < 0.01$) indicated a significant positive relationship. Consequently, the following propositions were formulated:

P1. Adhocracy culture is positively related to TQM implementation.

P2. Hierarchy culture is negatively related to TQM implementation.

P3. Group culture is positively related to TQM implementation.

P4. Market culture is negatively related to TQM implementation.

Employee readiness for change and commitment to change as mediators in the organizational culture- TQM implementation relationship

The direct-impact arguments for the influence of OC on the TQM implementation are quite strong and convincing. Nevertheless, a thorough review of the literature postulates a potential role for ERFC and EACC. That is, various types of OC may hold a sizeable indirect impact on TQM implementation through their effect on employee readiness and commitment to change. A comprehensive review of the relevant studies indicates that the difference between ERFC and EACC should be highlighted. Although ERFC and EACC are distinct concepts, they are also closely related (Holt et al., 2007; Herold et al. 2007; Neubert and Cady, 2001; Visagie and Steyn, 2011), causing the old ‘chicken and egg’ problem. Most studies, however, have suggested that ERFC is one of the most important predictors of EACC (Neubert and Cady, 2001; Visagie and Steyn, 2011; Holt et al., 2007; Herold et al., 2007). It is argued by Choi et al. (2016) that employees, who expect a personal benefit (e.g., a pay increase or long-term job security) from implementing change programs, will more likely be committed to change.

A study conducted by Santhidran et al. (2013) asserted that if an organization prepares their workers by increasing their employees’ readiness for change, it will result in them being committed to the change. They tested their hypotheses using partial least square. Their results confirmed the significant impact employees’ readiness ($\beta = 0.626$, $p < 0.001$) exerts on commitment to change. Moreover, various studies have found that employees who are more confident in their capability to handle the change process are likely to show higher affective commitment to change (Salvato and Rerup 2011; Neves, 2009, Neubert and Cady, 2001, Meyer et al. 2002; Judge et al. 1999). Also, Herold et al., (2007) found a significant impact of ERFC- Self-efficacy on employees’ commitment to change (coefficient = 0.326, $p < 0.01$) in South-eastern US industrial organizations.

Based on the above discussion, one would expect that enhancing employee readiness for change would eventually improve their affective commitment to change and, therefore, the following proposition is formulated:

P5. The higher the level of employee readiness for change, the higher the level of employee affective commitment to change.

The influence of employee readiness for change and individual commitment to change on TQM implementation

The influence that ERFC exercises on the success of TQM programs has been corroborated by several researchers such as Harvey and Millett (1999), Meirovich et al. (2006), Weeks et al. (1995) and Shea and Howell (1998). To this effect, organizational members' beliefs and attitudes impact the cognitive processes in which employees engage when deciding whether to implement TQM practices or not (Haffar et al., 2013). According to Bandura (1986), this type of cognitive processors is widely backed in the literature and believed to provide employees with self-regulated behavior also known as social cognitive theory. This theory suggests if employee's readiness for change is high, then they are likely to be committed to the change. Furthermore, employees will be more likely to put more effort to make sure the change process is successful and demonstrate greater perseverance against various hindrances and barriers that usually occur in the implementation phase (Gist and Mitchell, 1992). As a case in a point, Haffar et al. (2013) found that ERFC, as a unidimensional construct, has a positive impact on TQM implementation in Syrian manufacturing organizations (coefficient = 0.435 326, $p < 0.01$). On the basis of the above discussion, we predicted the following relationship:

P6. The higher the level of employee readiness for change, the higher the level of implementation of TQM practices.

The aforementioned hypothesis is divided into four sub-hypotheses to investigate the relationship between the components of employee readiness for change (self-efficacy, appropriateness, personal valence, and management support) and TQM implementation success.

Suitable training on the implementation of TQM practices will enhance the capability of employees to cope with it. Also, having received adequate training will encourage them to support the implementation of TQM in the workplace (Ingelsson et al., 2012; Shea and Howell 1998; Haffar et al., 2019). For instance, Haffar et al. (2019) investigated the impact of employees' readiness for change dimensions on TQM implementation in Algerian Manufacturing Organizations. They found that employees' self-efficacy has a positive impact ($\beta = 0.431$ $p < 0.001$) on TQM implementation. These studies indicate that the higher the self-efficacy levels of organization members, the more positive influence on the implementation of TQM. Thus, based on this, this paper proposes the underneath proposition:

P6a. Employees' self-efficacy perceptions will have a positive impact on TQM implementation.

Personal benefit is the second measure of employee readiness for change which was reflected by the term valence in the expectancy theory of motivation by Vroom (1967). Several authors, such as Bartunek et al. (2006) and Holt et al. (2007), have studied the significance of personal benefit towards employee readiness for change. Shea and Howell (1998) noted that members of the organization who perceive that they will reap benefits (ERFC- personal valence), such as promotional opportunities or rewards, as a result of their involvement in implementing TQM, tend to be more involved and accept the change process and the TQM implementation. This, in turn, leads those members to act in a way that is in line with the principles of TQM (Shea and Howell, 1998). It seems that when organizational members trust that they will not be at a

disadvantage, such as job loss or status downgrading, because of TQM implementation, they will be more ready for a new management system that is brought by the TQM practices and their adherences to practices will remain higher (Weeks et al., 1995; Whetten and Cameron, 1991). Haffar et al. (2019) found that employees' perceptions of personal benefits have a positive influence on TQM implementation ($\beta = 0.239$, $p < 0.001$) in Algerian Manufacturing Organizations. As a result, it is hypothesized:

P6b. Organizational members' perceptions of personal benefits will have a positive impact on TQM implementation

In the same vein, Choi et al. (2016) stress the importance of organizations' top management support for TQM induced changes. Gözükarar et al. (2019) studied the influence of employees' perceptions of management support on TQM implementation in Turkish health care organizations. Data was collected using a survey method and analysed using structural equation modelling. The path coefficient from top management support to TQM ($\beta = 0.53$, $p < 0.01$) affirmed a significant positive relationship. Based on these findings, the following proposition is developed:

P6c. Organizational members' perceptions of management support will have a positive impact on TQM implementation

Organizations that establish these significances of effective TQM execution, a shared goal and vision with their workers, will be endeavoring the pursuit of TQM with joined aspiration. Researchers like Case and Srikatiana (1988) stated that employees' perception of TQM practices relevance to improving organizational performance will enhance their willingness to participating in TQM implementation efforts. Al-Maamari et al. (2017) studied the relationship between TQM and readiness for change at Petroleum Exploration and Production Authority in Yemen. They

found a positive relationship between appropriateness and TQM implementation ($\beta = 0.832$, $p < 0.01$). Considering the above arguments and findings, we predicted the following proposition:

P6d. Organizational members' perceptions of change appropriateness will have a positive impact on TQM implementation.

Conversely, the work of Deming (1986) suggested that the success of TQM implementation depends on the level of commitment displayed by organization members, if the commitment to change is high, the TQM implementation is likely to succeed. In support of this claim, Shum et al., (2008) propounded that organization members with a high level of commitment will go that extra mile to ensure the change process is smooth and the initiatives are successful. Both arguments highlight that for the change process to be successful along with TQM implementation, the organization members will have to embrace a great level of commitment to change (Shum et al., 2008; Meyer et al., 2007; Meyer et al., 1998). Despite these claims, the literature indicates that few empirical studies have been conducted to test the impact of employee readiness and commitment for change on the implementation of TQM. For example, the findings of Bagga and Haque (2020) study indicate a positive relationship between commitment to change and TQM implementation ($r = 0.651$ and $p \leq 0.01$) in Indian IT organizations. Thus, this paper proposes the underneath proposition:

P7. Employee commitment to change will be positively related to TQM implementation.

The influence of organizational culture on employee readiness for change and commitment to change

Even though employee readiness and commitment to change are individual-level constructs, they require consideration of the organizational context (Jansen, 2000). Therefore,

scholars in the field of organizational change have started to focus on multiple factors that might support ERFC and ECC (Choi and Ruona, 2011; Jones et al., 2005).

OC is considered to be one of the most vital factors that could either enhance or hinder ERFC and ECC (Armenakis et al., 1993; Choi and Ruona, 2011; Jones et al., 2005; Messner, 2013; Neubert and Cady, 2001; Weiner, 2009). Many researchers argue that different OC types impact the level of ERFC (Choi and Ruona, 2011; Eby et al., 2000; Weiner, 2009) and ECC (Messner, 2013; Neubert and Cady, 2001; Shum et al., 2008). Nevertheless, limited studies have examined the impact of all OC types on both readiness and commitment to change.

Stability and an internal focus are two main traits that distinguish hierarchy culture where the focus is on managers maintaining unity and control to achieve internal goals (Cameron and Quinn, 1999). Organizations characterized by hierarchy culture discourage creativity and invention within their workforce. (Zammuto et al., 2000). Consequently, the level of readiness and commitment to change is more likely to be low among employees in such organizations. Sarhan et al. (2020) investigated the relationship between organisational culture and employees' commitment to change in the Jordanian hotel sector. The path coefficient from bureaucracy culture to commitment to change ($\beta = -0.44, p < 0.01$) affirmed a significant negative relationship. Therefore, it is proposed that:

P8. Hierarchy culture is negatively related to ERFCs.

P9. Hierarchy culture is negatively related to EACC.

Cameron and Quinn (1999) argued that organizations, characterized by the adhocracy culture, stimulate employees' creativity and the employment of new systems which enhances the productivity of the organization (Hartnel et al., 2011). To this effect, organizations dominated by adhocracy culture values offer higher levels of ERFC (Zammuto et al., 2000; Hartnel et al., 2011).

For example, Olafsen et al. (2020) collected data from a sample of 259 employees in a Norwegian public organization undergoing major strategic changes. They found that adhocracy culture has a positive impact on both employee affective commitment ($\beta = 0.34, p < 0.01$) and readiness for change ($\beta = 0.15, p < 0.05$). Therefore, the following propositions were developed:

P10. Adhocracy culture is positively related to ERFCs.

P11. Adhocracy culture is positively related to EACC.

In addition, Jones et al. (2005) explain that in organizations characterised by group culture, employees believe that by getting actively involved in the change process, they reap great benefits such as promotional opportunities. To this effect, employees would exhibit higher levels of readiness for change when the organization is dominated by group culture values. The outcomes of a multitude of research studies investigations demonstrate that group culture has a positive influence on ERFC and EACC (e.g., Jones et al., 2005; Shum et al., 2008; Vakola and Nikolaou, 2005). Moreover, team oriented employees are more likely to have a high level of commitment to change programs (Neubert and Cady, 2001). Jones et al. (2005) used hierarchal regression analysis to test the impact of organizational culture types on readiness for change in Australian organizations. The regression coefficient indicated that group culture ($\beta = 0.33, p < 0.01$) has a positive impact on employee readiness for change. Thus, we argue that increased employees' involvement in decision making will increase their affective commitment to change. Based on of the above arguments, we offer the following propositions:

P12. Group culture is positively related to ERFCs.

P13. Group culture is positively related to EACC.

It is argued by authors such as Cameron and Quinn (1999) and Zammuto et al. (2000) that organization dominated by market culture tend to be result-focused where matters like personal development, work motivation and staff engagement are not of concern to the top management (Cameron and Quinn, 2011). As a consequence, employees of such organizations tend to exhibit lower levels of ERFC and EACC. For example, the results of structural equation modeling (SEM) analysis indicate that market-oriented culture has a significant negative impact ($\beta = -0.17, p < 0.05$) on readiness for change in Malaysian insurance organizations (Suwaryo et al., 2015). Thus, it is hypothesized:

P14. Market culture is negatively related to ERFCs.

P15. Market culture is negatively related to EACC.

The previous 15 propositions demonstrate the connections amongst OC types, ERFCs, EACC and TQM implementation establish that OC's types impact TQM via their influence on ERFCs and EACC. Therefore, this study proposes that ERFC and EACC, as self-regulatory mechanisms, mediate and transmit the effects of OC types on TQM implementation.

P16. ERFCs mediate the effect of (a) group culture (b) hierarchy, (c) adhocracy and (d) market culture on TQM implementation.

P17. EACC mediates the effect of (a) group culture (b) hierarchy, (c) adhocracy and (d) market culture on TQM implementation.

The proposed conceptual framework

Prior studies of the relationships between employee commitment to change, employee readiness for change, organization culture and TQM implementation were fragmented and anecdotal. Following a comprehensive critical review of the literature, we established a proposed theoretical framework shown in Figure 1. This integrated framework aggregates and brings the abovementioned research propositions together, incorporating organizational culture types as antecedents to, and TQM implementation as consequence of, ERFC and EACC.

Using social cognitive theory and contingency theory, this framework was constructed. This framework is based on the assumptions that the more supportive OC types (causal variables), the greater level of ERFC and ECC (intervening variables), and the higher level of TQM implementation will be (outcome variable).

Firstly, beneath contingency theory principles is the supposition that organizational culture directly impacts TQM. Secondly, the model hypothesizes that, underneath the social cognitive theory principles, ERFC key components (appropriateness of change, support of management for change, personal benefit of the change and efficacy of the change) have a positive impact on EACC and TQM implementation. Correspondingly, beneath social cognitive principles are the supposition that EACC has a positive impact on TQM implementation. Based on social cognitive theory, this paper proposes that the effects of various types of organizational culture on TQM implementation is mediated by ERFC and EACC.

Additionally, our integrative theoretical framework constitutes an important extension to the research work of Prajogo and McDermott (2005), Zu et al. (2010) and Dellana & Hauser (1994), who investigated the impact of organizational culture on the execution of TQM. This new framework is established by conjoining the straight influence of organizational culture on TQM

and the indirect influence of organizational culture (through ERFC and EACC) on TQM in one unified model.

This framework offers advancement to the common understanding of to the impact of organizational culture on TQM, in that it aims to provide plausible descriptions of the mediators that transmit the effect of culture on the successful application of TQM. This framework highlights the importance of recognizing the significance of ERFC and EACC as a mechanism through which organizational culture types come to exercise effect on TQM implementation. As a consequence, the proposed model makes a novel contribution by offering a more advanced comprehension of the relationships between organizational culture types and TQM implementation.

Insert Figure 1 here

Discussion and directions for future research

This research makes important contributions to the literature of quality management, organizational behavior, and organizational change. Firstly, drawing on academic perspectives from various literature streams, this paper offers a more advanced understanding of the relationship between organizational culture and TQM implementation via exploring multiple mediating paths. Secondly, while most of the previous studies addressed the OC- TQM relationship in terms of Contingency Theory, our comprehensive review of the literature suggests incorporating Social Cognitive Theory to explicitly clarify the relationship between organizational culture and TQM implementation. Thirdly, drawing from contingency theory and social cognitive theory, we developed a conceptual model incorporating organizational culture types as antecedents to, and TQM implementation as a consequence of ERFC and EACC. This original model was

advanced by uniting the direct influence of organizational culture on TQM and the indirect effect of organizational culture (via ERFC and EACC) on TQM in a solo model (see Figure 1). Besides formally testing the model and aforementioned research propositions, we highlighted a number of gaps, in the current TQM and organizational change literature that future studies should aim to tackle.

First, the studies reviewed and analyzed above indicate that organizational change research has not satisfactorily incorporated the role of individual (psychological) resources in successful change implementation (Armenakis and Bedeian, 1999). Our review suggested that while ERFC and ECC are likely to have a positive influence on TQM implementation, there is a dearth of comprehensive research investigating the influence of employee readiness for change and individual commitment to change on TQM implementation. Very few empirical studies, as illustrated in Table 2, have examined the effect of individual commitment to change (Bagga and Haque, 2020) and employee readiness for change (Meirovich et al., 2006) on TQM implementation. Thus, we conclude that there is a clear need for further empirical research to test the impact of ERFC and ECC on TQM implementation.

Second, few recent studies have focused on the relationship between organizational culture and employee readiness for change. Moreover, there is limited empirical research that investigated the effect of certain types of organizational culture on employee readiness for change. For instance, Jones et al. (2005) explored the impact of only two types of organizational culture: adhocracy and group culture types on employee readiness for change. Surprisingly, there has been a lack of empirical research scrutinizing the impact of all types of organizational culture on employee readiness for change. This study recommends that future empirical studies study the role played by all four organizational culture types of the CVF model, namely, rational/market, hierarchical,

adhocracy and group cultures on employee readiness for change. In doing so, a holistic perspective is provided rather than the current partial perspective that focused on the influence of just some of the organizational culture types on employee readiness for change could be provided.

Third, and as shown in Table 2, although there has been many studies that investigated the role that organizational culture plays in TQM implementation, there has been partial work regarding the indirect influence of organizational culture on TQM through ERFC and EACC. To this effect, we conclude that there is a gap in the TQM literature failing to explore the mediating role of employee readiness for change and individual commitment to change on the relationship between organizational culture and TQM implementation. Therefore, the authors suggest that future studies need to address the mediating role of ERFC, ECC and other potential mediators in the organizational culture. We also suggest that it is meaningful for future research to address the mediating roles of ERFC and EACC simultaneously so that it can provide a clearer understanding of the link between organizational culture and TQM implementation.

Fourth, unlike previous studies (e.g., Jones et al., 2005) which considered ERFC as a one-dimensional construct, future studies should treat employee readiness for change as a multidimensional construct. Therefore, we suggest that future quantitative research studies should develop and validate a multi-dimensional construct of employee readiness for change. This stream of research can further verify the argument of this study and offer a clearer understanding of the role of ERFC.

Fifth, while our proposed framework introduces particular relationships among independent variables (organizational culture types), mediators, and dependent variable, it is likely that other, more complex, causal paths might exist among these categories. For example, individual commitment for change may serve as mediator between other employee readiness for change and

TQM implementation. Similarly, ERFC components may serve as mediators of organizational culture and EACC. Thus, beside the research that the framework presented in Figure 1 may extract, such further sets of relationships should also be considered.

Last but not least, our study used the integrative literature review as an approach to build subsequent research and commence of the “recurring cycle” of theory building, thus extending the knowledge base of researchers interested in the relationship between organizational culture, readiness to change and TQM. To further understand the relationship between TQM and other constructs, future studies should consider using meta-analysis approach.

Implications for practice

This study has enormous implications for organizations and policy makers alike by showing that due focus is essential in creating a culture of quality and capturing the human aspects of quality dimensions. This will consequently help to achieve sustainable competitive advantages for the 21st century enterprises.

First, this study stresses that despite its significance, employee readiness for change may become increasingly fragile and hard to sustain unless it goes hand-in-hand with supportive quality culture as a fertile soil for sustainable readiness for and commitment to change.

Second, this paper contributes significantly in explaining the distinctive roles of the underlying multidimensional psychological mechanisms of employee readiness and commitment to change in transferring the influence of supportive quality culture.

Third, in line with findings of Heinel et al. (2016), this paper highlights the significance of developing a more contextualized understanding of how different OC types support the implementation of organizational changes particularly TQM induced changes. One of the ways in

which management can enhance the implementation of the TQM is to adhere to the values resulted from adhocracy and group cultures. Such values inspire employees' creativity and encourage their collaboration and participation in the implementation of TQM.

Fourth, our study also indicates the importance of appreciating the role of employee readiness and commitment to change and how they could complement the effect of organizational culture in enhancing TQM implementation success. To this end, organizations need to measure ERFC prior to large-scale change implementation as diagnostic information that an organization can use to construct a precise understanding of the probability of effective change implementation. We believe that a low level of readiness for change should be taken positively, and as an opportunity for organizations to highlight problems that hinder the implementation of TQM induced changes. Addressing such problems could enhance the likelihood of TQM practices implementation success.

References

- Al-Khalifa, K. N. and Aspinwall, E. M. (2001), "Using the competing values framework to investigate the culture of Qatar industries", *Total Quality Management*, Vol. 12 No. 4, pp.417-428
- Adil, M. S. (2016), Impact of change readiness on commitment to technological change, focal, and discretionary behaviors, *Journal of Organisational Change Management*, Vol. 29. No 2, pp. 222 – 241
- Al-Maamari, Q. A., Abdulrab, M., Al-Jamrh, B.A. and Al-Harasi, A. H. (2017), "The Relationship between Total Quality Management Practices and Individual Readiness for Change at Petroleum Exploration and production Authority in Yemen". *International Journal of Business and Industrial Marketing*; Vol. 2 No. 6, pp. 48-55
- Anil, A. and Satish, K. P. (2019), "TQM practices and its performance effects – an integrated model", *International Journal of Quality & Reliability Management*, Vol. 36 No. 8, pp. 1318-1344
- Armenakis, A. A., Harris, S. G., and Mossholder, K. W. (1993), "Creating readiness for organizational change", *Human Relations*, Vol. 46 No.6, pp. 681–703.
- Armenakis, A. A., and Bedeian, A. G. (1999). "Organizational change: A review of theory and research in the 1990s". *Journal of Management*, Vol. 25 No. 1, pp. 293-315.
- Baird, K., Jia Hu, K. and Reeve, R. (2011), "The relationships between organizational culture, total quality management practices and operational performance", *International Journal of Operations and Production Management*, Vol. 31 No.7, pp.789-814
- Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*, Englewood Cliffs, NJ: Prentice-Hall.

Bartunek, J. M., Rousseau, D. M., Rudolph, J. W., and DePalma, J. A. (2006). On the Receiving End: Sensemaking, Emotion, and Assessments of an Organizational Change Initiated by Others, *Journal of Applied Behavioral Science*, Vol. 42 No. 2, pp. 182–206.

Bagga, S. K. and Haque S. N. (2020), “Total Quality Management as a change driver for influencing affective commitment to change: An empirical study in IT organisations of Delhincr region”, *Journal of Critical Reviews*, Vol. 7, No. 5, pp. 971-980

Belkhamza, Z. and Azizi Wafa, S. (2014), "Validating the organizational context measure for collective learning: a managerial action perspective", *The Learning Organization*, Vol. 21 No. 4, pp. 222-242.

Bou-Llusar, J. C., Ana, B. E. T., Vicete, R. P., and Beltrain-Martin, 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, pp. 1–22.

Cunningham, C. E., Woodward, C. A., Shannon, H. S., and MacIntosh, J. (2002), “Readiness for organizational change: A longitudinal study of workplace, psychological and Behavioral correlates”. *Journal of Occupational and Organizational Psychology*, Vol. 75, pp. 377-392.

Cameron, K. S., Quinn, R. E., DeGraff, J., and Thakor, A. V. (2006), *Competing values leadership: Creating value in organizations*. Northampton, MA: Elgar.

Cameron, K. S. and Quinn, R. E. (1999), *Diagnosing and changing organizational culture: based on the competing values framework*, Addison-Wesley, Inc.

Cameron, K. and Quinn, R. E. (2011). *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*. San Francisco: Josey-Bass

Case, S. S. and Srikatiana, P. (1998). Factors influencing TQM implementation in knowledge work environments: An integrative framework. *Academy of Management*, San Diego

Corredor, P., and Goñi, S. (2011), “TQM and performance: Is the relationship so obvious?”, *Journal of Business Research*, Vol. 64 No. 8, pp. 830-838

Chang, F. S. and Wiebe, H. A. (1996). “The Ideal Culture Profile for Total Quality Management: A Competing Values Perspective”, *Engineering Management Journal*, Vol. 8 No.2, pp.19-26

Choi, M., and Ruona, W.E.A. (2011), “Individual Readiness for Organizational Change and Its Implications for Human Resource and Organization Development”, *Human Resource Development Review*, Vol. 10 No.1, pp. 46–73.

Choi, Y., Kim, J. Y. and Yoo, T. (2016), “A study on the effect of learning organization readiness on employees’ quality commitment: the moderating effect of leader– member exchange”, *Total Quality Management & Business Excellence*, Vol. 27 No. 3-4, pp. 325–338.

Dellana, S.A. and Hauser, R.D. (1999), “Toward defining the quality culture”, *Engineering Management Journal*, Vol. 11 No.2, pp.11-15

Deming, W. E. (1986). *Quality Productivity and Competitive Position*, Cambridge, Massachusetts Institute of Technology

Detert, J. R., Schroeder, R. G., & Mauriel, J. J. (2000), A Framework for Linking Culture and Improvement Initiatives in Organizations, *Academy of Management Review*, Vol. 25, No. 4, pp. 850-863.

Dahlgaard-Park, S, Reyes, L., and Chen, C, (2018), “The evolution and convergence of total quality management and management theories, *Total Quality Management & Business Excellence*, Vol.29, pp.9-10

Eby, L.T., Adams, D.M., Russell, J.E.A. and Gaby, S.H. (2000), “Perceptions of organizational readiness for change: factors related to employees’ reactions to the implementation of team-based selling”, *Human Relations*, Vol. 53 No. 3, pp. 419–442.

Fundin, A., Bergquist, B. Eriksson, H. and Gremyr, I. (2018). “Challenges and propositions for research in quality management”, *International Journal of Production Economics*, Vol. 199 No.1, pp. 125-137

Gözükara, J., Çolakoğlu, N. & Şimşek, O. F. (2019), “Development culture and TQM in Turkish healthcare: importance of employee empowerment and top management leadership”, *Total Quality Management & Business Excellence*, Vol. 30 No. 11-12, pp. 1302-1318

Gimenez-Espin, J. A., Jiménez-Jiménez, D. and Martínez-Costa, M. (2013), “Organizational culture for total quality management”, *Total Quality Management and Business Excellence*, Vol. 24 No.5, 678-692

Gist, M. E. and Mitchell, T. R. (1992), “Self-Efficacy - a Theoretical-Analysis of Its Determinants and Malleability”, *Academy of Management Review*, Vol. 17 No.2, pp.183-211

Haffar, M., Al-Karaghoul, W., Irani, Z., Djebarni, R. and Gbadamosi, G. (2019), “The influence of individual readiness for change dimensions on quality management implementation in Algerian Manufacturing Organizations”, *International Journal of Production Economics*, Vol. 207 No. 1, pp. 247-260

Haffar, M., Al-Karaghoul, W. and Ghoneim, A. (2014), “An empirical investigation of the influence of organizational culture on individual readiness for change in Syrian manufacturing organizations”, *Journal of Organizational Change Management*, Vol. 27 No.1, pp.5-22

Haffar, M., Al-Karaghoul, W., and Ghoneim, A. (2013), “The mediating effect of individual readiness for change in the relationship between organizational culture and TQM implementation”, *Total Quality Management & Business Excellence*, Vol. 24 No.5-6, pp. 693-706

- Hartnell, C. A., Ou, A. Y., and Kinicki, A. (2011), "Organizational culture and organizational effectiveness: A meta-analytic investigation of the competing values framework's theoretical suppositions", *Journal of Applied Psychology*, Vol. 96 No. 4, pp. 677-694
- Harvey, S. and Millett, B. (1999). "OD, TQM AND BPR: A COMPARATIVE APPROACH", *Australian Journal of Management and Organizational Behaviour*, Vol. 2 No.3, 30-42
- Helmich, D. L. and Brown W. B. (1972). "Successor Type and Organizational Change in the Corporate Enterprise". *Administrative Science Quarterly*. Vol. 17, No. 3, pp. 371-381.
- Herold, D. M., Fedor, D B, and Caldwell, S. D. (2007), "Beyond change management: A multilevel investigation of contextual and personal influences on employees' commitment to change", *Journal of Applied Psychology*, Vol. 92 No. 4, pp. 942-951.
- Heinel, I., Beaujean P, and Schmitt R. (2016), Conceptual Framework for Analyzing the Fit between Organizational Strategy and Culture, *Procedia CIRP*, Vol. 51, pp. 79-84
- Herscovitch, L., and Meyer, J. P. (2002), "Commitment to organizational change: extension of a three component model", *The Journal of Applied Psychology*, Vol. 87 No.3, pp. 474-487.
- Hietschold, N., Reinhardt, R. and Gurtner, S. (2014). "Measuring critical success factors of TQM implementation successfully—a systematic literature review", *International Journal of Production Research*, Vol. 52 No.21, pp. 6254-6272.
- Holt, DT, Armenakis, AA, Field, HS, and Harris, S.G. (2007), "Readiness for Organizational Change: The Systematic Development of a Scale", *The Journal of Applied Behavioral Science*, Vol. 43 No.2, pp. 232-255.
- Ingelsson, P., Eriksson, M. Lilja, J. (2012) "Can selecting the right values help TQM implementation? A case study about organizational homogeneity at the Walt Disney Company", *Total Quality Management and Business Excellence*. Vol. 23 No.1, pp.1–11.

Jansen, K. J. (2000). The Emerging Dynamics of Change: Resistance, Readiness, and Momentum”. *Human Resource Planning*, Vol. 23 No.2, pp.53- 55

Jabnoun, N., & Sedrani, K. (2005), TQM, Culture, and Performance in UAE Manufacturing Firms, *Quality Management Journal*, Vol. 12 No. 4, pp. 10 -16.

Jenner, R. A., L. Hebert, A. and Baak, J. (1998), “Using Quality Management for Cultural Transformation of Chinese State Enterprises: A Case Study”, *Journal of Quality Management*, Vol. 3 No.2, pp.193-210

Jones, R.A., Jimmieson, NL, and Griffiths, A. (2005), “The Impact of Organizational Culture and Reshaping Capabilities on Change Implementation Success: The Mediating Role of Readiness for Change”, *Journal of Management Studies*, Vol. 42 No.2, pp. 361-386

Judge, T. A., Thoresen, C. J., Pucik, V., and Welbourne, T. M. (1999), “Managerial coping with organizational change: A dispositional perspective”. *Journal of Applied Psychology*, Vol. 84 No.1, pp.107-122.

Juran, J.M. (1988). *Quality control Handbook* 4thed, New York McGraw-Hill.

Lynham, S.A. (2000), “Theory building in the human resource development profession”. *Human Resource Development Quarterly*, Vol. 11 No.2, pp. 159–178

Lee, V., Ooi, K., Sohal, A. S and Chong , A. Y. (2012), “Structural relationship between TQM practices and learning organization in Malaysia's manufacturing industry”, *Production Planning and Control*, Vol. 23 No.10-11, pp.885-902

Meirovich, G., Galante, I, and Yaniv, K. M. (2006). “Attitudes Towards TQM and the Communication Process between Managers and Subordinates”, *Journal of Applied Management and Entrepreneurship*, Vol. 11 No.1, pp.74-86

McKay, K., Kuntz, J. and Naswall, K. (2013), “The Effect of Affective Commitment, Communication and Participation on Resistance to Change: The Role of Change Readiness”, *New Zealand Journal of Psychology*, Vol. 42 No. 2, pp. 29-40

McKinnon, J. L., Harrison, G. L., Chow, C. W., and Wu, A. (2003), “Organizational Culture: Association with Commitment, Job Satisfaction, Propensity to Remain, and Information Sharing in Taiwan”, *International Journal of Business Studies*, Vol. 11 No 1, pp. 25-44.

Messner, W. (2013), “Effect of organizational culture on employee commitment in the Indian IT services sourcing industry”, *Journal of Indian Business Research*, Vol. 5 No.2, pp.76-100

Meyer, J. P. and Herscovitch, L. (2001), “Commitment in the workplace: Toward a general model”, *Human Resource Management Review*, Vol. 11 No.3, pp.299–326

Meyer, J.P., Stanley, D.J., Herscovitch, L., and Topolnytsky, L. (2002), “Affective, continuance, and normative commitment to the organization”, *Journal of Vocational Behavior*, Vol. 61 No.1, pp. 20–52.

Meyer, J.P., Allen N.J. and Topolnytsky, L. (1998), “Commitment to a changing work of work”, *Canadian Psychology*, Vol. 39 No. 1-2, pp. 83-93.

Meyer, J. P., Srinivas, E. S., Lal, J. B. and Topolnytsky, L. (2007), “Employee commitment and support for an organizational change: Test of the three-component model in two cultures”, *Journal of Occupational and Organizational Psychology*, Vol. 80 No.2, pp. 185-211

Neubert, M.J., and Cady, SH. (2001), “Program commitment: a multi-study longitudinal field investigation of its impact and antecedents”, *Personnel Psychology*, Vol. 54 No. 2, pp. 421-448

Neves, P. (2009), “Readiness for change: Contributions for employee's level of individual change and turnover intentions”, *Journal of Change Management*, Vol. 9 No.2, pp. 215-231

Olafsen, A.H., Nilsen, E.R., Smedsrud, S. and Kamaric, D. (2020), "Sustainable development through commitment to organizational change: the implications of organizational culture and individual readiness for change", *Journal of Workplace Learning*

Panuwatwanich, K. and Nguyen T. T. (2017), "Influence of Organizational Culture on Total Quality Management Implementation and Firm Performance: Evidence from the Vietnamese", Construction Industry. *Management and Production Engineering Review*, 8 No. 1, pp. 5–15.

Parish, J. T., Cadwallader, S., & Busch, P. (2008), "Want to, need to, and ought to: employee commitment to organizational change", *Journal of Organizational Change Management*, Vol. 21 No 1, pp 32-52.

Petticrew, M. and Roberts H. (2005). *Systematic Reviews in the Social Sciences: A Practical guide*, Wiley-Blackwell

Prajogo, D. and McDermott, C. (2005), "The relationship between total quality management practices and organizational culture", *International Journal of Operations and Production Management*, Vol. 25 No.11, pp. 1101-1122

Porras, J. I. and Silvers R. C. (1991), "Organization development and transformation", *Annual Review of Psychology*, Vol. 42 No.1, pp. 51-78.

Salvato, C., and Rerup, C. (2011). "Beyond collective entities: Multilevel research on organizational routines and capabilities", *Journal of Management*, Vol. 37 No 2, pp. 468–490

Sarhana, N., Harbb, A. Shrafata, F. and Alhusbana, M. (2020). "The effect of organizational culture on the organizational commitment: Evidence from hotel industry", *Management Science Letters*. Vol. 101, pp. 83–196

Sadikoqlu, E. and C. Zeihr. (2008), "The impact of contextual factors on total quality management practices". *Journal of Global Strategic Management*, Vol. 4, 88-97

Santhidran, S., Chandran, V. G. R., and Borromeo, J. (2013), “Enabling organizational change – leadership, commitment to change and the mediating role of change readiness”, *Journal of Business Economics and Management*, Vol. 14 No.2, pp. 348-363

Shafritz, J. M., Ott, J. S., and Jang, Y. S. (2011). *Classics of organization* (7th ed.). Belmont, CA: Wadsworth

Shea, C. and Howell, J. (1998), Organizational Antecedents to the Successful Implementation of Total Quality Management, *Journal of Quality Management*, Vol. 3 No.1, pp. 3-24

Sila, I. (2007), “Examining the effects of contextual factors on TQM and performance through the lens of organizational theories: an empirical study”, *Journal of Operations Management*. Vol. 25 No.1, pp. 83–109.

Srinivasan, A. and Kurey, B. (2014), “Creating a culture of quality“, *Harvard Business Review*, Vol. 92 No. 4. pp. 23-25

Soltani, E., Lai P.G Gharneh, N.S. (2005), “Breaking Through Barriers to TQM Effectiveness: Lack of Commitment of upper-level Management”, *Total Quality Management*. Vol. 16 No.8/9, 1009–1021.

Smith, I. (2005), “Achieving readiness for organizational change”, *Library Management*, Vol. 26 No 6, pp. 408-412

Sonenshein, S. and Dholakia, U. (2011), “Explaining Employee Engagement with Strategic Change Implementation: A Meaning-Making Approach”, *Organization Science*, Vol. 23 No 1, pp.1-23

Shum, P., Bove, L., and Auh, S. (2008). “Employees' affective commitment to change: The key to successful CRM implementation”, *European Journal of Marketing*, Vol. 42 No11-12, pp.1346–1371

- Sousa, R. and C.A. Voss, (2002), "Quality management revisited: a reflective review and agenda for future research", *Journal of Operations Management*, Vol. 20 No.1, 91–109
- Sahoo, S. (2019), "Quality management, innovation capability and firm performance: Empirical insights from Indian manufacturing SMEs", *The TQM Journal*, Vol. 31 No. 6, pp. 1003-1027.
- Su, S., Baird, K., & Blair. B. (2009), *Employee organizational commitment: the influence of cultural and organizational factors in the Australian manufacturing industry*, *The International Journal of Human Resource Management*, Vol. 20 No 12, pp. 2494-2516
- Suwaroyo, J; Daryanto, H. K., and Maulana, A. (2015), "Organizational Culture Change and its Effect on Change Readiness through Organizational Commitment". *International Journal of Administrative Science & Organization*, Vol. 22, No.1, pp. 68-78
- Tranfield, D., Denyer D. and Smart, P. (2003), "Towards a methodology for developing evidence informed management knowledge by means of systematic review", *British Journal of Management*, Vol. 14 No.3, pp. 207–222.
- Torraco, R. J. (2005), "Writing integrative literature review: Guidelines and examples", *Human Resource Development Review*, Vol. 4 (3), pp. 356–367.
- Tenji, T. and Foley, A. (2019), "Testing the readiness of an organizational culture profile to a TQM implementation", *TQM Journal*, Vol. 31 No. 3, pp. 400-416.
- Vakola, M. and Nikolaou, I. (2005), "Attitudes towards organizational change: What is the role of employees' stress and commitment?", *Employee Relations*, Vol. 27 No.2 , pp. 160-174
- Van der Wiele, T., van Iwaarden, J., Williams, R., and Eldridge, S. (2011). A new foundation for quality management in the business environment of the twenty-first century. *Total Quality Management & Business Excellence*, Vol. 22 No.5, pp. 587–598

Visagie, C. M. and Steyn, C. (2011), “Organizational commitment and responses to planned organizational change: An exploratory study”, *Southern African Business Review*, Vol. 15 No.3, pp. 98- 121

Vroom, V. H., (1967), *Work and motivation*. John Wiley and Sons.

Weiner, B. J. (2009), “A theory of organizational readiness for change”, *Implementation Science*, 4 No.1, 1-9

Weeks, B., Helms, M. M. and Etkin, L.P. (1995), “Is your organization ready for TQM? An assessment methodology”, *The TQM Magazine*, Vol. 7 No.5, pp. 43–49

Weiner, B. J. (2009), “A theory of organizational readiness for change”, *Implementation Science*, Vol. 4 No. 67, pp. 1-9

Whetten, D.A. and Cameron, K.S. (1991), “*Developing Management Skills*”. 2nd ed., HarperCollins, London.

Yong, K.T., and Pheng, L.S. (2008), “Organizational culture and TQM implementation in construction firms in Singapore”, *Construction Management and Economics*, Vol. 26, pp. 237 - 248.

Zammuto, R. F., Gifford, B. and Goodman, E. A. (2000), Managerial ideologies, organization culture and the outcomes of innovation: A competing values perspective, In Ashkanasy, N.,

Zhao, X., Yeung A. C. L and Lee. T. S. (2004), “Quality Management and Organizational Context in Selected Service Industries of China”. *Journal of Operations Management*, Vol. 22, pp. 575-587

Zu, X., Robbins, T.L. and Fredendall, L.D. (2010), “Mapping the critical links between organizational culture and TQM/Six Sigma practices”. *International Journal of Production Economics*, Vol. 123 No.1, pp. 86-106

Zu, X., Zhou, H., Zhu, X. and Yao, D. (2011), "Quality management in China: the effects of firm characteristics and cultural profile", *International Journal of Quality & Reliability Management*, Vol. 28 No. 8, pp. 800-821.

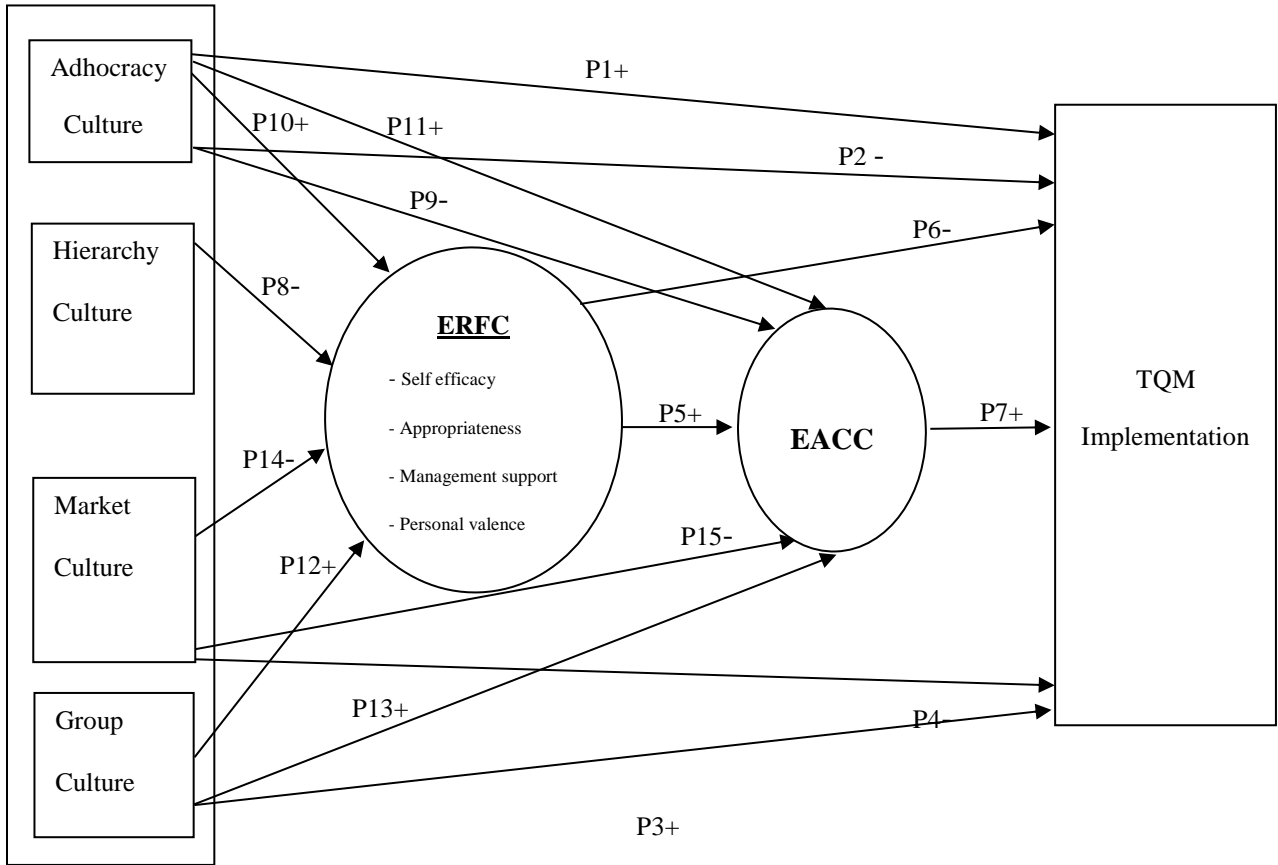


Figure 1. Proposed Conceptual Framework