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An empirical investigation of the influence of organizational culture on individual readiness for change in Syrian manufacturing organizations

Purpose – While few recent studies have paid attention to the relationship between Organizational Culture (OC) and Individual Readiness for Change (IRFC), there is still a lack of systematic and empirical studies regarding the influence of all OC types on the IRFC components within the change management literature. This study aims to fill this gap in the literature by empirically examining the influence of all four organizational culture types of the Competing Values Framework (CVF) on the components of IRFC regarding TQM implementation, within the context of manufacturing organizations operating in Syria.

Design/methodology/approach – A total of four hypotheses were proposed for testing. A questionnaire was developed and distributed to 350 Syrian Manufacturing Organizations (SMOs) in order to measure the level of IRFC and to identify the cultural profiles and characteristics of these organizations.

Findings – The analysis of the collected shows that certain types of organizational culture are conducive to fostering IRFC. In particular, the findings of an empirical investigation revealed that group culture and adhocracy culture are the most supportive culture types for IRFC.

Originality/value – This paper contributes to the existing literature of change management by providing empirical evidence leading to advancement of knowledge and the understanding of the relationship between OC types and IRFC components. Furthermore, the paper adds value via its contextual originality; being the first study that empirically examined the Syrian cultural context, and hence contributing to the scarce body of literature of both OC and IRFC, and in particular the developing countries.

Keywords Organizational culture, Change management, Individual readiness for change, TQM, Manufacturing organizations, Syria

Paper type Research paper

Introduction

In today's era of intense global competition, the pace of change that influences businesses is ever increasing. Many new change and transformational initiatives have been developed in order to improve the organizational performance and achieve sustainable competitive advantages (Wanberg & Banas, 2000; By, 2007; Shah, 2011; Fuentes-Henríquez & Del Sol, 2012). Successful organizations are under great pressure to be prepared to cope with these pressing changes in order to survive in the competitive global marketplace (Lawson & Price, 2003; Fuentes-Henríquez & Del Sol, 2012). However, many studies have highlighted a high rate of failure in change implementation (Klein & Sorra, 1996; Abdul Rashid et al., 2004; Soltani & Wilkinson, 2010; Abdolshah & Abdolshah, 2011; Choi & Ruona, 2011).

The recent literature in the change management area has established that Individual Readiness for Change (IRFC) is one of the most significant factors for successful implementation of organizational change (Armenakis et al., 1993; Weeks et al., 1995; Clegg & Walsh, 2004; Jones et al., 2005; Holt et al., 2007; Sikh, 2011). According to scholars, ignoring the vital role of individuals in the change process as well as the low level of IRFC, causes difficulties and in some cases failures in implementing many change initiatives such as total quality management (Meirovich et al., 2006), knowledge management (Rusly et al., 2012) and management information systems (Jones et al., 2005).

Amongst other contextual factors, Organizational Culture (OC) was recognized to be one of the most important factors that could either foster or decrease IRFC (Armenakis et al., 1993; Weiner, 2009; Jones et al., 2005; Choi & Ruona, 2011). Therefore, there is a need of a better understanding of which types of culture more favorably foster IRFC.

Few recent research studies and mostly conceptual in nature have paid attention to the relationship between OC and IRFC. In addition, there are limited empirical studies that have examined the impact of some of OC types on IRFC. For example, Jones et al. (2005) have investigated the influence of two types only of OC types namely, human relations; group and adhocracy culture types on IRFC. Surprisingly enough, there is a lack of empirical studies investigating the influence of all OC types on IRFC. The purpose of this study is to fill this gap by empirically examining the influence of all the four organizational culture types of the

CVF model, namely group, developmental, hierarchical and market/rational, on IRFC, in order to give a holistic perspective, rather than focusing on the influence of some of the OC types on IRFC.

To the best of the authors' knowledge, this is the first study to perform such an analysis using Syrian manufacturing organizations (SMOs). The manufacturing sector in Syria makes a small contribution to the gross domestic product (GDP) (Slman, 2009; Ahmad, 2012). Recently, many organizational changes and reforms including TQM have been introduced in SMOs (Naser et al., 2006; Zaher, 2006). However, most of the SMOs who are involved in implementing these new programmes have faced significant obstacles which decrease the level of change implementation success (Zaher, 2006; Al-Ather, 2010). There is very fragmented research and mostly conceptual regarding the obstacles that hinder the implementation of change programmes in SMOs. According to these few and small scale studies, the majority of SMOs seem to practice these change initiatives, such as TQM, without taking their members' readiness for change and the conditions that foster it, such as OC, into consideration. It is anticipated that the outcomes of this research will add to the body of knowledge concerning the OC- IRFC relationship in developing countries with particular interest on Syria, as the dynamics of the business environment is changing rapidly.

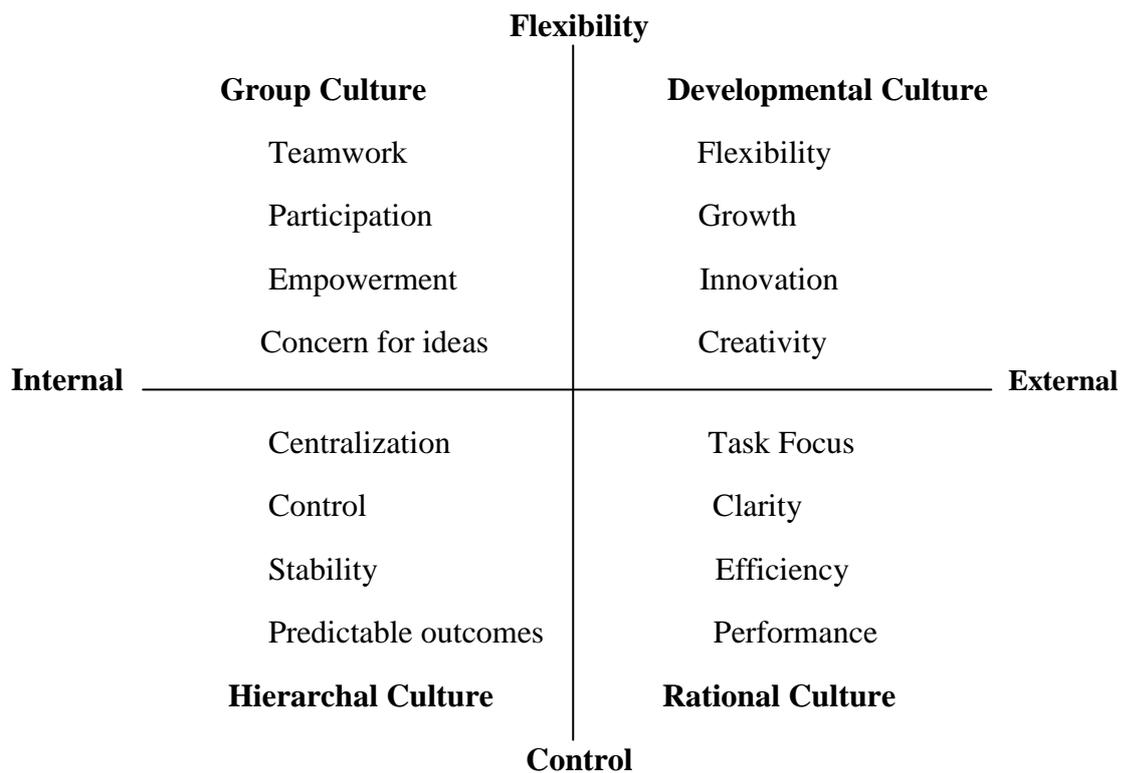
Literature Review and Hypotheses Development

Organizational Culture

According to Schein (1992), organizational culture (OC) is defined as the assumptions, values and norms shared by the members of an organization. Schein (1992) stated that these underlying values and norms affect the behavior of individuals in organizations. Recent literature in the field of change management shows that there is an increasing recognition of the influence of OC on change implementation success (Jones et al., 2005; Baird et al., 2011). It is argued by a number of authors such as Abdul Rashid et al. (2004), Hernández-Mogollon et al. (2010) and Baird et al. (2011) that OC can function as a driver, 'fertile soil' or barrier to the implementation of new change initiatives. The results of many research studies show that OC influences the performance of the organization (Kwantes & Boglarsky, 2007; Kuo & Kuo, 2010; Naor et al., 2010; Prajogo & McDermott, 2011). On the other hand, it is argued

by Cameron and Quinn (1999) that ignoring the effects of OC is one of the biggest obstacles in implementing many new change initiatives in organizations. They consider that diagnosing, assessing and identifying the current status of the OC is very important to determine the required changes to increase the effectiveness of the organizations.

It is worth mentioning that, many researchers have built models and instruments to measure and assess OC. One of the most common models to assess OC is the competing values framework (CVF) developed by Quinn (1988). As shown in figure I, the CVF is built upon two axes to reflect different value orientations (Denison & Spreitzer, 1991). The horizontal axis represents the level to which an organization concentrates on its external or internal operation and functioning, while the vertical axis expresses the level to which a company has a control or flexibility tendency (Denison & Spreitzer, 1991). Based on these two dimensions, four types/quadrants of OC are developed: group, developmental, hierarchical and rational cultures.



Cameron & Quinn (1999) developed the organizational culture assessment instrument (OCAI) based on the competing values framework (CVF). This model has six dimensions, namely dominant characteristics, leadership style, management of employees, organizational glue, strategic emphasis and criteria of success. Analyzing these six dimensions produced four types of OC. These include adhocracy culture, group culture, market culture and hierarchy culture. The characteristics of OC types as defined by Cameron & Quinn (1999) are presented in Figure II. These culture styles are dominant and not mutually exclusive. It is argued by Denison & Spreitzer (1991) that organizations often comprise a mix of the four cultural types rather than comprising only one exclusive culture; however, one type of culture may emerge as the dominant one. Several studies have proved the reliability and validity of the CVF and its matched scale, OCAI (Al-khalifa & Aspinwall, 2000; Cheng & Liu, 2007; Yu & Wu, 2009).

<p>The Clan/group Culture</p> <p>A very friendly place to work where people share a lot of themselves. It is like an extended family. The leaders, or the heads of the organization, are considered to be mentors and perhaps even parent figures. The organization is held together by loyalty of tradition. Commitment is high. The organization emphasizes the long term benefit of human resources development and attaches great importance to cohesion and morale. Success is defined in terms of sensitivity to customers and concern for people. The organization places a premium on teamwork, participation, and consensus</p>	<p>The Adhocracy Culture</p> <p>A dynamic, entrepreneurial, and creative place to work. People stick their necks out and take risks. The leaders are considered innovators and risk takers. The glue that holds the organization together is commitment to experimentation and innovation. The emphasis is on being on the leading edge. The organization's long-term emphasis is on growth and acquiring new resources. Success means gaining unique and new products or services. Being a product or service leader is important. The organization encourages individual initiative and freedom</p>
<p>The Market/Rational Culture</p> <p>A result oriented organization whose major concern is with getting the job done. People are competitive and goal oriented. The leaders are hard drivers, producers and competitors. They are tough and demanding. The glue that holds the organizations together is an emphasis on winning. Reputation and success are common concerns. The long-term focus is on competitive actions and achievement of measurable goals and targets. Success is defined in terms of market share and penetration. Competitive pricing and market leadership are important. The organizational style is hard-driving competitiveness.</p>	<p>The Hierarchy Culture</p> <p>A very formalized and structured place to work. Procedures govern what people do. The leaders pride themselves on being good coordinators and organizers who are efficiency-minded. Maintaining a smooth-running organizations is most critical. Formal rules and polices hold the organization together. The long-term concern is on stability and performance with efficient, smooth operations. Success is defined in terms of dependable delivery, smooth scheduling, and low cost. The management of employees is concerned with secure employment and predictability.</p>

Figure II. The Organizational Culture Profile and Competing Values Framework

Source: Cameron & Quinn (1999, p.96)

Individual Readiness for Change

Significant attention has recently been paid to the individual readiness for change (IRFC) construct in organizational change literature. Many authors have begun stressing the concept of individual readiness for change (Jones et al., 2005; Holt et al., 2007; Choi & Ruona, 2011). A number of scholars such as Armenakis et al. (1993), Clegg & Walsh (2004), Jones et al. (2005) and Holt et al. (2007) have highlighted the importance of psychological factors or human factors in change implementation efforts. According to the researchers, ignoring the vital role of individuals in the change process, cause a failure or difficulties in implementing many change initiatives (Armenakis et al., 1993; Weeks et al., 1995; Clegg & Walsh, 2004; Jones et al., 2005; Holt et al., 2007; Sikh, 2011). They also argue that IRFC (i.e. attitude towards change) has a significant and positive impact on the successful implementation of organizational change.

According to Armenakis et al. (1993, p.298), perception of readiness for change is defined as “the cognitive precursor to the behaviors of either resistance to, or support of, a change effort”. Jones et al. (2005, p.362) developed this concept and consider that readiness for change is “the extent to which employees hold positive views about the need for organizational change (i.e. change acceptance), as well as the extent to which employees believe that such changes are likely to have positive implications for themselves and the wider organization”. While previous studies considered IRFC as a one-dimensional construct, Holt et al. (2007) defined IRFC as a multidimensional construct composed of: individuals’ belief in their ability to carry out the proposed change (i.e., change-specific efficacy), management support for the change, appropriateness of the change, and personal benefit of the change (i.e., personal valence).

Organizational members’ readiness for change involves individuals’ evaluation about the benefits that members and their wider organization may achieve from a change implementation, the individual and organizational ability for performing change, and the need for organizational change (Armenakis et al., 1993; Eby et al., 2000; Holt et al, 2007).

The members in organizations can be either key for accomplishing change implementation success or the greatest hindrance to its success (Smith, 2005). Organizational members’ negative attitude towards the change initiative is one of the biggest obstacles which lead to the failure of intended organizational change (Jones et al., 2005). Armenakis et al. (1993)

consider that low level of change readiness is the major reason for organizations failing in their trials to implement change successfully. This is confirmed in other studies such as By (2007) who found that there is a relationship between the level of IRFC and the successful management of change. Therefore, change management specialists have stressed the significance of creating IRFC in order to increase the probability of change implementation success (Armenakis et al., 1993; Jones et al., 2005; By, 2007; Weiner, 2009).

Linking Organizational Culture Types to Individual Readiness for Change

It is argued by Choi & Ruona (2011) and Weiner (2009) that OC is one of the most important contextual factors that increase or decrease the level of readiness for change. Many scholars consider that OC types influence the level of individual readiness for organizational change (Armenakis et al., 1993; Weiner, 2009; Choi & Ruona, 2011). Few studies have addressed the impact of OC types on IRFC (Eby et al., 2000; Abdul Rashid et al., 2004; Jones et al., 2005).

According to Cameron and Quinn (1999, p.58): “an organization dominated by group culture emphasizes the long term benefit of human resources development (e.g. training) and attaches great importance to cohesion and morale”. They add that “this organization places a premium on teamwork, participation, and consensus”. As a result, the members of this kind of organization are more likely to have higher levels of readiness for organizational change (e.g. TQM implementation) due to their beliefs that they are capable of implementing a proposed change and feel confident that they would perform well and be successful. This is due to adequate training they receive and their awareness with regard to the proposed change initiative, which enables them to have the abilities and skills to make the new practices work (Holt et al., 2007).

In addition, members of such organizations are more likely to have positive attitude towards the proposed changes, because they believe that their organization will not introduce and implement any changes that might result in negative effects on its members. As such organization is being internal-customer focused, emphasizing the long-term benefits of human resources, and attaching great importance on morale. In addition, the members of organizations dominated by the values of group culture believe that they will gain benefits as a result of their participation in achieving a successful change implementation, such as

promotional opportunities or rewards. Consequently, organizational members are more likely to have higher levels of readiness for change when they perceive their work environment to have the characteristics associated with a group culture (Eby et al., 2000; Jones et al., 2005). By emphasizing the group culture values, organizational members are more likely to be ready psychologically and willing to implement change initiatives. Therefore, based on the discussion thus far, the following hypothesis was formulated:

H1. An organization's emphasis on the group culture will be positively associated with the level of individual readiness for change.

On the other hand, organizations dominated by the market culture, are result-orientated organizations whose major concern is with getting the job done (Cameron & Quinn, 1999). The leaders focus on achieving the biggest market share with less confederating and caring of the morale and development of the human resources in the organization (Cameron & Quinn, 1999; Zammuto et al., 2000). In other words, the question of morale and personnel development tends to be less important by the leaders who are more single-minded in getting the job done and increasing the profits. As a result, the members of this kind of organization are more likely to feel that the implementation of such changes in their organization is not worthwhile for them. In addition, they might feel that they lose their standing and that their job is limited in the organization with the implementation of these changes (e.g. TQM practices). Consequently, the members of this kind of organization are more likely to have low levels of readiness for organizational change. Therefore, the hypothesis H2 was developed:

H2. An organization's emphasis on the market culture will be negatively associated with the level of individual readiness for change.

Cameron & Quinn (1999) consider that the hierarchy culture is associated with bureaucracy and formal and high complex rules, policies and procedures. It is argued by Zammuto et al. (2000) that organizations dominated by the hierarchy culture do not encourage innovation and creativity. In these organizations, the leaders give directions from a centralized decision-making process (Cameron & Quinn, 1999). In addition, these organizations resist the implementation of new change initiatives and ignore or minimize environmental influences (Zammuto et al., 2000). Interpersonal relations tend to demonstrate lower levels of trust and morale with higher levels of conflict and resistance to change (Zammuto et al., 2000). Consequently, the members of this kind of organization are more

likely to have negative attitude towards the organizational change. Thus, organizations dominated by the hierarchy culture offer a lower level of IRFC. The above discussion suggests that:

H3. An organization’s emphasis on the hierarchy culture will be negatively associated with the level of individual readiness for change.

In contrast, organizations dominated by the adhocracy culture type pose an active, energetic, innovative nature and tend to be flexible. These organizations encourage an individual initiative and the implementation of new ideas, models and programmes such as TQM to increase the efficiency of their organization (Cameron & Quinn, 1999). As a result, organizational members who perceive their work environment to have characteristics associated with the adhocracy culture are more likely to have higher levels of readiness for change (Zammuto & Krakower, 1991; Zammuto & O’Connor, 1992). It is concluded that organizational members who rate their OC as being high in adhocracy culture values perceive higher levels of readiness for change (i.e., are more likely to possess positive attitudes towards organizational change). Therefore, the following hypothesis was developed:

H4. An organization’s emphasis on the adhocracy culture will be positively associated with the level of individual readiness for change.

Based on the theoretical discussions and proposed relationships, a conceptual framework is developed as shown in Figure III.

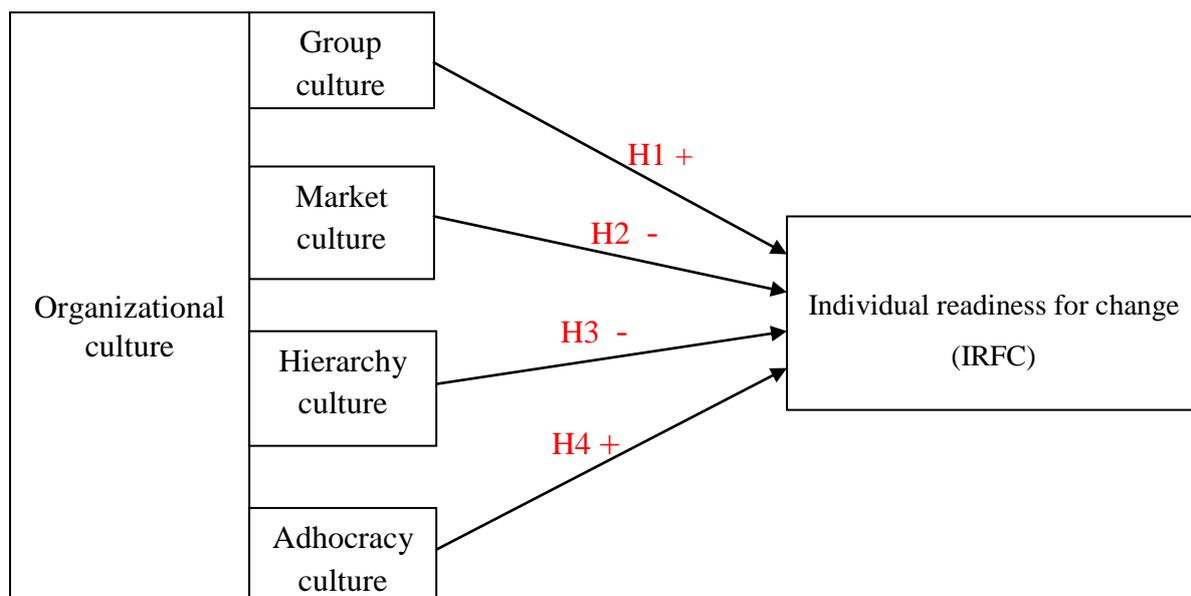


Figure III The Conceptual Framework of the Research Study

Research Methodology

In order to achieve the main aim and objectives of this study, the researchers have utilized two reliable and valid instruments from prior studies. In order to identify the cultural profile and characteristics of SMOs, the organizational culture assessment instrument (OCAI) developed by Cameron & Quinn (1999) was used.

In order to measure the level of IRFC components, the reliable and valid instrument developed by Holt and his colleagues (2007) was adopted. Unlike previous studies which treated IRFC as a one-dimensional construct, Holt et al. (2007) developed a more precise measurement of IRFC. They treated it as a multifaceted measure that distinguishes between four components of IRFC. This study use the scale of Holt et al. (2007) as it fully captures existing definitions of IRFC and offers better operationalization of this variable. This instrument consists of 25 items designed to assess the extent to which organizational members feel positive about the implementation of TQM as a new change initiative. The respondents asked about their perception and evaluation regarding the benefits that members and the wider organization may achieve from a change implementation, the individual and organizational ability for performing change, and the need for organizational change. All the items were assessed via a 5-point Likert-scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Content validity was checked using experts and academics from Syrian universities before the questionnaires were distributed to the target sample. All the experts considered that the questionnaire was appropriate, would achieve the aim of the study and needed only a little editing. The proposed questionnaire was then adjusted and amended according to the feedback and comments of the experts.

The target population of this research consists of all the public and private SMOs involved in implementing change initiatives. The population of SMOs is concentrated mostly in ten cities. However, 60% are based in two cities, which are Damascus and Aleppo. Contacting and distributing the questionnaires to all the relevant companies was difficult due to the geographical spread, the time factor and the financial limitation of this research. The researchers chose to adopt a random sampling technique and selected a representative sample

consisting of 350 SMOs in Aleppo and Damascus. A personal distribution of the final version of the questionnaire to one participant (operation, production or quality manager) for each organization was adopted as it was considered the most efficient method of data collection in the Syrian context.

This study approached the manager who is the most familiar with the topic in each organization to complete the questionnaire. It is worth indicating that this methodological approach has been used in previous studies (Goll & Rasheed, 1997; Hart & Banbury, 1994). The middle managers were considered as the key participants in this research. Bower (1970) considered that middle managers are the key agents of change. In addition, middle manager performs the critical task of championing transformation proposals within a company (Schnider et al., 1996). Therefore, their perception of the internal environment and readiness for change is balanced and very to adopt the required change.

Analysis and Results

All the data were analyzed using the Statistical Package for the Social Sciences (SPSS V.16). The total number of completed questionnaires was 204, of which 196 were useable. The overall response rate was thus 56 percent (196/350). Cronbach's coefficient alpha measure was used to estimate the degree of the internal consistency of each construct. All the scales have a high reliability and the values of Cronbach's alpha derived for the constructs vary between 0.706 and 0.839.

Descriptive Statistics

The majority of the respondents (80.6%) were from private organizations, and the remainders were from public organizations. With regard to respondents' work positions, 78.57% of the respondents were production managers, 6.1% were operations managers, 9.1% were quality managers and 7.6% of the respondents hold other work positions.

The completion of OCAI provided a picture of the OC profiles of SMOs. Table I illustrates the current dominant culture types of SMOs. It is evident that the hierarchy and market culture types are dominant.

Table I here

Table II presents the mean score for each component of IRFC in SMOs. According to the mean values, it is clear that the level of IRFC is very low in SMOs.

Table II here

Correlation Analysis

A correlation analysis procedure was conducted with the use of Pearson correlation in order to describe the “strength and direction of the linear relationship between two variables” (Pallant, 2005, p.121). Table III details the values of the Pearson correlations as well as the significance values.

Table III here

The Pearson correlation coefficients show that there are correlations between all IRFC components and all types of OC. The values of correlation coefficient show that there are strong positive correlations between IRFC components and group culture as hypothesized. The result of the analysis has further indicated that adhocracy culture types have strong and positive influences on IRFC components– the level of IRFC components increases as the score of this culture type rises. In contrast, the analysis shows that both, the hierarchy and the market culture types have strong and negative influences on IRFC components– the level of IRFC components decreases as the scores of these culture types fall. Thus, the results support the four research hypotheses H1, H2, H3 and H4.

The results of the analysis have further indicated that IRFC components have a higher coefficient of correlation with the group and adhocracy culture types. The highest correlations coefficients have been found between group culture and two of IRFC components, namely personally beneficial and change efficacy, in which value of correlation coefficient is 0.309 ($p < 0.01$) and 0.301 ($p < 0.01$) respectively. In the same manner a strong relationship and high correlations coefficients have been found between adhocracy culture and two of IRFC components, namely management support and appropriateness, in which value of correlation coefficient is 0.220 ($p < 0.01$) and 0.197 ($p < 0.01$) respectively.

Although correlation is very useful research tool, it tells us nothing about the predictive power of variables (Field, 2009). In addition, a series of such correlation analysis could overstate and exaggerate the apparent overall explanatory power of a group of independent variables. Thus, this study conducted more sophisticated and advanced analysis using multiple regressions to overcome the above mentioned weaknesses. A series of multiple regressions were carried out to seek additional evidence and to examine in depth the influence of OC types on IRFC. This helps in determining the most important variables (culture values) that organizations should emphasize upon, in order to increase the level of IRFC.

Multiple Regression Analysis

Multiple regression analysis was conducted to examine in more depth the influence of OC types on IRFC components. This was carried out to investigate the relative significance of different OC types in predicting IRFC components. This helps in determining the most important variables (culture values) that organizations should be emphasized in order to increase the level of IRFC.

All the regression models tested met the validity requirements and no problem was detected. Thus, these models, which were generated from the sample, can be accurately applied to the population of interest (Field, 2009). The the variance inflation factor (VIF) values of the independent variables for all models is less than maximum level of 10 and the Tolerance (TOL) value in all models is higher than the minimum level of 0.2. These statistics indicated no multicollinearity problem exist among the independent variables in all models. Thus, multicollinearity was not a problem (Myers, 1990; Hair et al., 2006; Meyers et al., 2006; Callaghan and Chen, 2008).

The regression models have explanatory power (adjusted R^2) value of .290, .299, .141 and .158, respectively. Thus, approximately 29%, 30 %, 14% and 16% of the dependent variables namely, IRFC-personally beneficial, IRFC-management support, IRFC-self efficacy and IRFC-appropriateness are explained by combined effect of the four independent variables (OC types), respectively. The overall models tested were highly statistically significant (F-value significant on 1% level), which means all the reported models are reliable.

As a consequence, the regression models provide an acceptable prediction of the dependent variables.

Overall, as shown in Table IV, adhocracy culture and group culture have positive and significant effects on TQM implementation. These results strongly support both of the research hypotheses numbers H1 and H4. However, the effect of market culture and hierarchy culture are not significant; thus, H2 and H3 are not supported.

The above findings show that adhocracy and group culture types are the most influential culture types on IRFC components. They made significant contribution to explaining the variation in IRFC components. Of the two significant independent variables, adhocracy culture is the more important variable in explaining the variation in IRFC components, as it had the highest Beta value, followed by group culture. Thus, the regression analysis supported the correlation analysis results of a significant positive association between adhocracy culture/ group culture and IRFC components.

However, the regression analysis indicated that market culture and adhocracy culture, reported by correlation analysis to have a significant negative association with IRFC components, were not significantly associated with IRFC components. This finding is due the fact that bivariate statistics are not as accurate as multivariate statistics. It appears that in the presence of group and adhocracy culture types, which have a strong impact on IRFC components, hierarchy and market culture types lose their effect and become relatively less significant. Thus, they are the least influential culture types in IRFC components as compared to the other OC types, i.e., group and adhocracy culture types.

Table IV here

Discussion and Conclusion

While few recent studies have paid attention to the relationship between organizational culture (OC) and individual readiness for change (IRFC), few previous studies have examined the impact of all OC types on IRFC. This paper empirically examined the influence of all four organizational culture types of the CVF model on the components of IRFC. This was done in order to give a holistic perspective instead of focusing on the impact of some of the OC types on IRFC. Therefore, our paper contributes to the existing literature on change management by providing empirical evidence leading to advancement in the understanding of the relationship between OC types and IRFC components.

Furthermore, unlike previous studies which considered IRFC as a one-dimensional construct, this study measured IRFC as a multidimensional construct composed of individuals' belief in their ability to carry out change practices, management support for the change, change appropriateness and personal benefits of the change. This provides better understanding of the relationships between IRFC components and OC types.

The findings of this study have shown that the level of IRFC in SMOs is very low. In addition, it is found that the OCs in the majority of SMOs tend to have a mixture of the four culture types of the CVF instrument. However, hierarchy culture and market culture were the dominant OC types in SMOs. This supports the argument of Quinn and Kimberly (1984, cited in Dellana & Hauser, 1999), who found that 'no organization is likely to reflect only one [value system]. Instead, 'we would expect to find combinations of values, with some being more dominant than others'.

In addition, the results from this study demonstrate that IRFC is strongly influenced by OC. This supports the argument of many authors such as Choi & Ruona (2011) in their conceptual research, where they stated that OC is one of the most important contextual factors that impact upon the level of IRFC. Very few authors such as Jones et al. (2005) and Eby et al. (2000) have found that the characteristics of group and adhocracy culture types are associated with higher levels of IRFC. Similar findings have been found in SMOs where the level of IRFC is positively influenced by the group and adhocracy culture types. In addition, it is evident from the findings of this study that the characteristics of market and hierarchy

culture types are associated with lower levels of IRFC components, namely personally beneficial, management support, appropriateness and change efficacy.

The findings of this study indicate that hierarchical culture and market culture have less of significant effects on IRFC. However, the characteristics and values of hierarchical and market culture types are overemphasized in SMOs. In these organizations, there are formal and highly complex rules, policies, procedures and relationships which members of organizations must follow. In addition, these organizations do not encourage innovation and creativity. The organization's members work according to fixed rules and they do not have the opportunity to change and innovate. Thus, they fail to achieve continuous improvement and thereby improved customer satisfaction, which is embodied in TQM.

The research has shown that, the major focus of the managers of these organizations is to get the work done and to achieve the biggest market share and profit in a short time, with less confederating and caring about the morale and development of the human resources in the organization. The majority of SMOs have not prepared their members psychologically to implement new change initiatives. In these organizations, employees do not receive encouragement and rewards for participating in the implementation of change initiatives. The organizational members in SMOs have not received the necessary training and skills that are required to implement TQM practices. Therefore, this led them to believe that they are not able to perform successfully with the implementation of TQM, and that they will not get any personal benefits from TQM implementation either. In addition, organizational members in SMOs feel that the implementation of TQM does not benefit, and improve the overall efficiency of their organizations. The results of this study indicated that organizational members in SMOs reported low levels of readiness for change and held a negative attitude towards TQM implementation.

It can be concluded that organizational members in SMOs, who rate their OC as being high in hierarchy and market culture values rather than group and adhocracy culture values, are less willing to accept the implementation of TQM practices. Therefore, the dominant OC in SMOs (hierarchy and market culture types) is one of the major obstacles causing low level of IRFC.

Managerial implications

The results of this study offer several useful implications for practitioners engaged in facilitating change and interested in enhancing the level of IRFC by identifying the supportive and more favorable OC types which improve the employees' acceptability of change.

This study stresses the importance of assessing the current position of OC to identify the gap between the current OC profiles, characteristics, and those required to achieve high level of IRFC. This will help to determine the changes needed to build a supportive culture. If considerable gaps are found and no action taken to bridge those gaps, low level of IRFC would be expected, and consequently, change implementation would be threatened.

This study highlights that, in order to foster individual readiness for organizational change, the values of the hierarchy and market culture types should not be overemphasized as is evident in current practice in SMOs. These values necessitate working with other cultural types in order to improve the effectiveness of TQM implementation. The leaders of SMOs should change their existing culture and move their emphasis towards the values and characteristics of the group and adhocracy cultures. Managers in SMOs should adopt flexible policies and regulations. They should encourage organizational members to be innovative and creative in order to achieve continuous improvement and increase the effectiveness of their organization.

While creating IRFC, SMOs should focus on long-term rather than short-term profits and concentrate on human resource improvement. The leaders of SMOs should provide their members with training on the implementation of various TQM practices. This results in a reinforcement of employee's feelings of self-efficacy and promoting feelings of readiness for change. SMOs should explain the positive influence of adopting various change initiatives on the performance of their organizations. In addition, the leaders of SMOs should motivate their members by establishing a fair incentive system and reward the members who participate in TQM implementation success. This leads to strengthen of the members' feelings of personal benefits which would gain as a result of participation in TQM implementation.

By emphasizing the group culture and adhocracy culture values, organizational members in SMOs are more likely to be ready psychologically and willing for TQM implementation. The values of group and adhocracy culture types would support the development of individuals' positive attitudes and readiness towards TQM implementation in SMOs. Creating this supportive culture would foster individuals' readiness for organizational change consequently increase individuals' involvement in the implementation of TQM. When organizational members' readiness for change is high, possessing a strong positive attitude towards TQM, they are more willing to accept the implementation of TQM. This in turn leads them to behave in a manner consistent with TQM principles showing higher levels of involvement in TQM execution efforts. Consequently, this would assist SMOs to achieve global marketing effectiveness and competitiveness in the international markets.

Limitations and further research

There are some shortcomings of this research that lead to avenues for future research. One limitation is that this research is not longitudinal in design, because the researcher used a cross-sectional research design, which restricted the researcher's ability to tackle or refer to the change or development of the phenomenon under study over a period. This study recommends that future studies use the longitudinal research design in order to be able to study the possible changes and developments of a phenomenon and the relationship between the variables of this study over a period of time.

In addition, this study recommends that future studies use in-depth interviews along with questionnaires in order to provide deeper and broader information on the influence of OC types on the components on IRFC. This would be useful to enhance the validity and reliability of the findings and reduce the degree of bias.

Furthermore, the questionnaire was distributed to one respondent in each organization. A problem common to the organizational-level study regarding whether an individual response can represent the intended firm-level situations could exist. While the use of multiple raters may enhance the reliability of our measures, inclusion of "less knowledgeable informants can actually decrease the accuracy of responses" (Huber & Power, 1985, p. 175). This study approached one relevant in each organization who is the most familiar with the topic to complete the questionnaire. However, using only one respondent may still exist as a

limitation to this study. It will be recommended for future research the use of multiple respondents in one organization in order to decrease the influences of systematic response bias.

Additionally, the findings of the current study are limited to the Syrian manufacturing organizations and for this reason they should not be generalized to whole sectors. It is hoped - that many researchers who are interested in the Syrian context will take this study as a basis and repeat it in other sectors such as education, tourism, health, banking sectors, etc.

Finally, the current study focuses on SMOs; the characteristics of these organizations may be relatively different from those in other countries. Therefore, the findings of this study should not be generalized. However, these results may give an essential reference for organizations in other Arab countries whose cultures and climates are similar to those in Syrian organizations. This research study provides a basis for future studies, and recommends its replication in different countries and contexts.

References

Abdolshah, M. and Abdolshah, S. (2011), "Barriers to the successful implementation of TQM in Iranian manufacturing organizations", *International Journal of Productivity and Quality Management*, Vol. 7 No. 3, pp. 358 – 373

Abdul Rashid, M. Z., Sambasivan, M. and Abdul Rahman, M. (2004), "The influence of organizational culture on attitudes toward organizational change", *Leadership and Organization Development Journal*, Vol. 25 No. 2, pp. 161 - 179

Ahmad, F. (2012), "Syrian industry in the face of challenges", *White and black magazine*, [Online], Available at: <http://www.awaonline.net/index.php?action=show&type=news&id=668> (Accessed: 2 February 2012)

Al- Ather, N. (2010), "Planning to establish Syrian Quality Award with corporation with The European Union", *EuroJar*, [Online], Available at: <http://www.eurojar.org/> (Accessed: 7 March 2011).

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

Al-Khalifa, K.N. and Aspinwall, E.M. (2000), "The Development of Total Quality Management in Qatar", *The TQM Magazine*, Vol. 12 No.3, pp. 194–204

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

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 & Production Management*, Vol. 31 No.7, pp. 789-814

Bower, J. L. (1970), *Managing the resource allocation process*. Boston: Harvard University Press.

By, R. T. (2007), "Ready or not", *Journal of Change Management*, Vol.7 No. 1, pp. 3–11.

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

Callaghan, K., and Chen, J. (2008), "Revisiting the collinear data problem. An assessment of estimator 'ill-conditioning' in linear regression", *Practical Assessment, Research and Evaluation*, Vol. 13 No. 5, pp .1-6

Cheng, C. W. M and Liu, A M. M. (2007), "The Relationship of Organizational Culture and the Implementation of Total Quality Management in Construction Firms", *Surveying and Built Environment*, Vol. 18 No. 1, pp. 7-16

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

Clegg, C., and Walsh, S. (2004), "Change management: Time for a change", *European Journal of Work and Organizational Psychology*, Vol. 13 No. 2, pp. 217–23

Goll, I. and Rasheed, A. (1997), "Rational Decision-Making and Firm Performance: The Moderating Role of Environment", *Strategic Management Journal*, Vol. 18, No. 7, pp. 583-591

Denison, D.R. and Spreitzer, G.M. (1991), "Organizational culture and organizational development: a competing values approach", *Research in Organizational Change and Development*, Vol. 5, pp. 1-21

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

Field, A. (2009), *Discovering Statistics: using SPSS for Windows* (3rd ed.), Sage Publications, UK

Fuentes-Henríquez, F. and Del Sol, P. (2012), “Analogical foundation of the scope of organizational change”, *Journal of Organizational Change Management*, Vol. 25 No. 1, pp.163 – 185

Hair, J. F., Black, W. C., Babin, B.J., Anderson, R. E., and Tathan, R. L. (2006), *Multivariate data analysis*, Pearson Prentice-Hall, New Jersey

Hart, S.L and Banbury, C. (1994), “How Strategy-making Processes Can Make a Difference,” *Strategic Management Journal*, Vol. 15, No. 4, pp. 251–268

Hernández-Mogollon, R., Cepeda-Carrión, G., Cegarra-Navarro, J. G. and Leal-Millán, A. (2010), “The role of cultural barriers in the relationship between open-mindedness and organizational innovation”, *Journal of Organizational Change Management*, Vol. 23 No. 4, pp.360 - 376

Holt, D. T., Armenakis, A. A., Field, H. S. and Harris, S. G. (2007), “Readiness for Organizational Change: The Systematic Development of a Scale”, *The Journal of Applied Behavioural Science*, Vol. 43 No. 2, pp. 232-255

Jones, R. A., Jimmieson, N. L. 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

Klein, K. J. and Sorra, J. S. (1996), “The challenge of innovation implementation”. *Academy of Management Review*, Vol. 21 No. 4, pp. 1055-1080.

Kuo, T. and Kuo, Y. (2010), “The effect of corporate culture and total quality management on construction project performance in Taiwan”, *Total Quality Management*, Vol. 21 No.6, pp. 617–632

Kwantes, C. T. and Boglarsky, C. A. (2007), “Perceptions of organizational culture, leadership effectiveness and personal effectiveness across six countries”, *Journal of International Management*, Vol. 13 No.2, pp. 204-230

Lawson, E. and Price, C. (2003), "The psychology of change management", *The McKinsey Quarterly*, No.2, pp.30-9

Meyers, L. S., Gamst, G., and Guarino, A. J. (2006), *Applied multivariate research: Design and interpretation*. Thousands Oaks, Sage

Naser, A., Brez, B., and Akras, S. (2006), “Research and development in Syrian industrial institutions”, *Centre for Studies and Scientific Research* (In Arabic)

Naor, M., Linderman, K. and Schroeder, R. (2010), “The globalization of operations in Eastern and Western countries: Unpacking the relationship between national and organizational culture and its impact on manufacturing performance”, *Journal of Operations Management*, Vol. 28 No.3, pp. 194–205

- 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
- Myers, R.M. (1990), *Classical and Modern Regression with Applications*, PWS-Kent Publishing Company, Boston, MA
- Pallant, J (2005), *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows (Version 12)*, 2nd ed., Open University Press
- Prajogo, D. I. and McDermott, C. M. (2011), “The relationship between multidimensional organizational culture and performance”, *International Journal of Operations & Production Management*, Vol. 31 No.7, pp. 712-735
- Quinn, R.E. (1988), *Beyond rational Management: mastering the paradoxes and competing demands of high performance*, San Francisco: Jossey-Bass
- Rusly, F., Corner, J. L. and Sun, P. Y. T. (2012), “Positioning Change Readiness in Knowledge Management Research”, *Journal of Knowledge Management*, Vol. 16 No. 2, pp.329 - 355
- Schein, E. (1992), *Organizational culture and leadership*, 2nd ed., Jossey-Bass, San Francisco
- Schneider, A.P., Brief, R.A., and Guzzo, R. (1996), "Creating a climate and culture for sustainable organizational change", *Organizational Dynamics*, Vol. 24, pp.7 - 19
- Shah, N. (2011), “A study of the relationship between organizational justice and employee readiness for change”, *Journal of Enterprise Information Management*, Vol. 24 No.3, pp. 224-236
- Sikh, G. (2011), “Analysis of attitudes and behaviours of employees towards organizational change”, *International journal of Human Resource Management and Research*, Vol. 1 No.1, pp. 1-13
- Slman, H. A. (2009), “Industry’s role in activating and increasing Syrian gross domestic product”, *Syrian international Freight Forwarders Association*, [online], Available from: <http://www.siffa.org.sy/modules/news/article.php?storyid=825> (Accessed: 17 February 2012)
- Smith, C. S., Barnes, R. and Townsend, M. C. (2002), “Culture surveys: monitoring and enhancing the impact of change programmes”, *Total Quality Management*, Vol. 13 No.6, pp. 855-861
- Soltani, E. and Wilkinson, A. (2010), "Stuck in the middle with you: The effects of in congruency of senior and middle managers' orientations on TQM programmes", *International Journal of Operations & Production Management*, Vol. 30 No.4, pp. 365 – 397
- Wanberg, C. R. and Banas, J. T. (2000), “Predictors and Outcomes of Openness to Changes in a Reorganizing Workplace”, *Journal of Applied Psychology*, Vol. 85 No.1, pp. 132-142
- Weeks, B., Helms, M. M. and Ettkin, 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

Yu, T. and Wu, N. (2009), "A Review of Study on the Competing Values Framework", *Journal of Business and Management*, Vol. 4 No.7, pp. 37-42

Zaher, B. (2006) 'Improving the Quality of Internal Transport Services from a Total Quality Management Perspective: A Practical Study of Public Internal Transport Companies in Syria', *Tishreen University Journal for Studies and Scientific Research- Economic and Legal Science Series*, Vol. 28 No.1, pp. 12-18 (In Arabic)

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., Wilderom, C. and Peterson, M. (Eds.), *The Handbook of Organizational Culture and Climate*, Sage, Thousand Oaks, CA, pp. 261-287

Zammuto, R. F. and Krakower, J. (1991), "Quantitative and qualitative studies of organizational Culture", In Woodman, R. W. and Passmore, W. A. (Eds), *Research in Organizational Change and Development*, Greenwich, CT: JAI Press, pp. 83-144

Zammuto, R. F. and O'Connor, E. (1992), "Gaining advanced manufacturing technologies' benefits: the roles of organization design and culture", *Academy of Management Review*, Vol. 17, pp. 701-728