

RESEARCH ARTICLE

THE INFLUENCE OF TRANSFORMATIONAL LEADERSHIP ON INNOVATIVE WORK BEHAVIOR AMONG ACADEMICIANS IN IRAQ

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Abstract

In the developing countries, the higher education is facing issues related to the need for exceptional leaders that can address the globalization and rapidly changing environment. Innovation is crucial for all organizations, particularly learning organizations and institutions. Therefore, in this research, the impact of transformational leadership (TL) on innovative work behavior was examined, as moderated by quality culture in the context of Iraqi higher education institutions (HEI). Three hundred and fifteen (315) questionnaires were distributed to academic staff in Iraqi public HEIs. The study utilized PLS2 for data analysis and the findings showed that TL plays a key role in improving innovative work behavior and the style is appropriate in the Iraqi HEIs as it promotes strategies to develop innovation within the sector. In particular, the findings indicated a positive relationship between TL and innovative work behavior, with the negative moderating effect of quality culture. The study recommends guidelines for researchers and leaders in light of the use of TL in enhancing innovative work behavior in HEIs in developing countries, specifically Iraq. The study provided implications of findings and recommendations for future avenues of research.

Key Words: Transformational leadership, innovative work behavior, quality culture, higher education.

1. Introduction

In the present times, the higher education sector the dynamic environment rife with technology change and increased demands are placing insurmountable pressure on the higher education (HE) sector and this has attracted the interest of academic and practitioner circles (Mathew, 2010). Similar to other sectors, the academic sector requires development of abilities and responding to the pressured demands (Fullwood, Rowley & Delbridge, 2013). In this line of study, Obendhain and Johnson (2004) stressed the importance of higher education institutions (HEIs) as generators of innovation that brings about products/services creation. HEIs supply training, expertise and personnel to all industry sectors and with the critical need for innovation among organizations and their need for competitive advantage, the style of leadership has been highlighted as the top factor that influences innovative work behavior. This is because leaders can influence the creation of ideas, establish specific goals and develop and innovative culture (Sarrors, Cooper & Santora, 2008).

According to past studies in literature, transformational leadership (TL) is the top leadership style as it addresses emotions, values, and creativity of followers and it generates innovation (Saenz, 2011). TL also obtains employee commitment and creates higher work quality and creative problem solving processes (Yukl, 2013). In a related study, TL practices were reported to lead to greater followers' trust in leaders, after which enhanced individual performance is brought about (Ismail et al., 2010). Similarly, Dubrin (2012) indicated that transformational leaders reinforce the achievement capacity among employees through the inculcation of knowledge and the facilitating of resources in their tasks at the workplace. TL therefore drives innovative work behavior through the promotion of mutual trust, which in turn, improves the employees' self-confidence (Bass & Riggio, 2006).

In higher education institutions, the adoption of TL by leaders urges academic staff's participation in educational initiatives to promote and develop skills and to accomplish excellent performance. It also boosts the staff's determination to overcome crises and their creation of novel ideas that form the backbone of innovation (Saenz, 2011). Developing countries higher education sector, like the one in Iraq is currently facing challenges calling for exceptional leadership (Herbst & Conradie, 2011). Moreover, Iraqi HE has been playing a key role in the development of the country's workforce and economy (Al-Hussenia & Elbeltagia, 2015). In this background, quality culture is described as the design of sources and behaviors that are acknowledged and adopted by people as the norm of resolving problems. It can be obtained in a combined version comprising methods, rules and principles overlapping with background skills, knowledge and attitudes of organizational investors (Mahmood, Mohammed, Misnan, Yusof & Bakri, 2006).

More specifically, quality culture in HE forms a blueprint of the organization's cultural patterns consisting of beliefs, values and day-to-day procedures (Ehlers, 2006). In the Iraqi case, the quality culture of HE has been an oversight in literature although quality culture is believed to be important in improving the innovation in the organization (Wu et al., 2011). In this regard, theoretical and empirical researches are called for to examine quality culture development and its application among institutions (Ehlers, 2009).

As for the empirical evidence concerning the TL-innovative work behavior relationship, the findings reported seem to be mixed (Basu & Green, 1997; Shin & Zhou, 2003). In this relationship, Barron and Kenny (1986) recommended that inconsistent results could be refreshed by introducing a moderating variable between two latent variables. The reviewed literature indicated the consideration of moderating effects of quality culture on TL and innovation behavior (Bain, Mann & Merlo, 2001; Elenkov & Manev, 2005). Based on the above discussion, it is quality culture is thus considered in this study as a moderator between TL-innovative work behavior. This is because when an institution facilitates a good environment to its employees and provides them with opportunities, they are more inclined to express their ideas, to perceive strong organizational support for innovation and to exert additional effort. In other words, if the innovation in the institution is supported, the TL-innovative behavior should be significant.

However, although quality culture is pertinent in increasing quality and innovative work behavior, Iraqi higher education still lacks quality standards as evidenced by the Education Quality Index reported by the World Economic Forum in Davos (Al-Sharq, 2017). The report excluded six Arab countries owing to their lack of quality standards in education and these include Sudan, Iraq, Syria, Yemen, Libya and Somalia.

In the past, Iraq had advanced level of HE that catapulted to the top of the Middle Eastern countries but things changed for the worse after the invasion (UNESCO, 2004). Owing to wars and economic embargo imposed in the years from 1991 to 2003, Iraq digressed as academics and scientists in varying specialized fields left the universities, and thus, creating a brain drain in the country. On the basis of the UNESCO 2003 report, from 1991 onwards, the Iraqi professors were isolated from their international peers and this left an adverse impact on Iraqi universities to the point when they lagged far behind their international counterparts.

In the present time, if the Iraqi education sector is to achieve global standards, it requires changes in the form of enhancements of systems, methods, curricula, approaches and leadership style. In the latter regard, Iraqi public HEIs need distinctive and exceptional leaders as opposed to traditional leaders as they have to compete with the present competitive environment (Al-Hussein & Elbeltagi, 2015). Hence, this study focuses on this issue to assist the leaders of Iraqi public HEIs in their development of innovation, overcoming of barriers, and using suitable management strategies for the sector. Through this study, it is expected that information can be clarified concerning the sector's systems and policies.

2. Literature Review

2.1 Innovative Work Behavior

The past few years has brought about notable changes in various business sectors all around the world necessitating organizations, firms and institutions to develop creative solutions to issues and to maintain successful performance (Agarwal, 2014). Organizations have to employ continuous innovation in their processes when it comes to products and internal procedures. More importantly, they have to leverage their staff's abilities and capabilities in developing innovation (Gupta, Guha & Krishnaswami, 2013) as employees' creativity is a source of new ideas that could be applied by the team or the organization for the survival and maintenance of the organization (Agarwal, 2014).

Furthermore, innovative work behavior is described as the process generating a change in light of products, processes or procedures that are new to the firm (Sapie et al., 2015). It can be viewed as motivation and cognitive process of the individual employee or a team of employees, reflected through specific activities (Masood & Afsar, 2017). According to Damanpur (1991) innovative work behavior is the generation, growth and use of new ideas/behavior that could be in the form of new product/service, development, or management of systems, and new work initiatives among workers. It consists of production of ideas and behaviors needed for the implementation and enhancement of ideas that could facilitate overall improvement of firm performance (De Jong & Hartog, 2008). In the same line of study, Farr and Ford (1990) claimed that it is the individual's behavior that leads to the initial and voluntary generation of new and important ideas, methods, products and processes.

2.2 Transformational Leadership

In the social science field, the leadership concept has been receiving attention in the past decades, with a greater proportion of pioneering literature dedicated to military environment, and of the present literature to modern commercial firms because of the existing cultures (Khaola & Sephelane, 2013). Presently, many firms have become more aware of the several aspects related to different leadership styles, qualities, applications and related theories (Owusu, Kalipeni, Awortwi & Kiiru, 2015).

Generally speaking, leadership refers to the organizational spirit that is connected to work and it is a must in addressing future challenges (Chen et al., 2008; Robbins & Judge, 2007). More specifically, transformational leadership refers to the process that effectively drives followers to develop and perform beyond the expectations of the organization (Bass, 1985). Notably, the stress on the leadership types has turned to transformation leadership and it has become a crucial topic in leadership research and world leaders (Bass & Avolio, 1990; Bass, 1999). Similarly, Robbins and Judge (2011) defined transformational leaders as those that inspire followers to think over their self-interests in a manner that significantly influences them. They drive their followers and enhance their needs to facilitate work tasks and high performance achievement (Bass, 1985).

Added to the above, transformational leaders imbue their followers with the inspiration to look forward to a more positive future and to encourage their loyalty and extra efforts and innovation to accomplish the goals of the organization (Avolio, Zhu, Koh & Bhatia, 2004). They provide their subordinates with the potential to utilize their autonomy, responsibility, self-determination and to

handle challenges without hesitation (Liden et al., 2000). Transformational leaders have the capability of influencing the attitudes, behaviors, beliefs and values of their followers in order to meet organizational aims (Belhaj, 2012). They are capable of developing a united vision and providing a clear picture of how complex problems can be dealt with, how to think logically, as well as boosting subordinates' participation and incentives, share information with them and obtaining their trust through collaborative activities, and lastly, being role models for the formation of behaviors and setting up of goals (Bass & Avolio, 2004; Kirkbride, 2006).

2.3 Quality Culture

Quality culture refers to the group of norms, values, concepts, beliefs and rules shared by individuals and groups in an organization that are linked to the quality importance of the organization (Detert, Schroeder & Mauriel, 2000). Studies concerning quality that related to culture involve the use of implementation and methods, where quality is the outcome of the cultural elements (values and practices) of the organization upon which leadership and working norms are of importance. In fact, the development of quality culture is a significant topic worthy of exploration to meet shareholder satisfaction and trade competitiveness in an environment characterized by dynamism and risks (Campos, Mendes, Silva & Valle, 2014).

This explains why quality direction has shifted to employee behavior, norms and beliefs for in-depth outcomes (Campos et al., 2014; Wang, Chen & Chen, 2012). Authors that dedicated their works to the topic are in agreement as to the employment of quality as a source of advantages in the business environment, where innovation, knowledge development, demanding consumers and technology all contribute to (Grezel, Fesenmaier & O'Leary, 2006). In the latter part of the 20th century, studies about quality concentrated on the technical aspects and tools as opposed to culture although lack of cultural support is the reasons behind failed organizations (Barrett & Waddell, 2001). In relation to this, the cultural perspective on quality stemmed from experiential results that indicated the failure of quality programs used without an effective value system to support them (Barrett & Waddell, 2001), or the existence of contradictory effects through various industries (Cameron & Sine, 1999), or issues of other nature (Zu, Robbins & Friendendall, 2010).

Additionally, quality management has been recently introduced to the modern era of HE (Ehlers, 2009) that is notable in the activities of scientists in the quality development in the sector. Such activities stem from essential capabilities, new competencies and shared values (Wolff & 2004). Quality management and quality control competencies are often deemed as technocratic methods that lead to failure, specifically in the HE sector (Ehlers, 2009). In the HE, quality culture as opposed to quality criteria is of importance as the former facilitates the base upon which quality based on a general viewpoint is built that includes numerous elements including influence quality (attitudes and skills of instructors, and capabilities and stimulus of learners, organizational background, environments and values, and instructions from legislation, rules and regulations) (Ehlers, 2009).

2.4 The Relationship between Transformational Leadership and Innovative Work Behavior

Transformational leadership refers to leadership generating awareness and acceptance of subordinates, allowing them to develop potential, to consider beyond their needs, to achieve the goals of the organization, and to motivate them via the behaviors of the leader (Avolio & Bass, 2004). In particular, a transformational leader boosts the subordinates' view of the institution's vision so that they may generate innovation for excellence (Chen et al., 2012; Si & Wei, 2012). Such leaders provide a shared vision and are able to facilitate the suitable workplace environment that is ripe for creativity and innovation (Saenz, 2011; Vaccaro et al., 2012). Majority of studies in this caliber have evidenced the positive and significant TL-innovative work behavior relationship in various sectors (e.g., Al-Omari & Hung, 2012; Eisenbeib & Boernor, 2010; Masood & Afsar, 2017).

In addition, the transformational leadership theory proposes that shared leader-followers understanding result in enhanced management and followers' morale. Burns (1978) was the first to propose an expansive organizational process that combined different economic, political and interpersonal resources to accomplish institutional values and aims. Following his proposal, Alzawahreh (2011) expounded on idealized influence – a top characteristic of transformational leadership that is important in the HE surroundings to inculcate admiration, display a sense of purpose, boost teaching staff morale, and facilitate culture change where innovation is promoted. With regards to inspirational motivation, it is described as the leader's encouragement of

communication processes, organizational learning and vision shaping that enables staff to employ innovation methods and conduct related activities (Bass & Riggio, 2006).

Inspirational leaders stimulate their followers intellectually to enhance ideas generation and to utilize exploratory thinking (Bass & Riggio, 2006). In this regard, followers who are encouraged by their leaders to address and solve old problems in current ways and who are more aware of the importance of new ideas, are more inclined to come up with innovative ideas for the development of product and innovation (Zhang & Batrol, 2010; Khan et al., 2009). Finally, individualized consideration of leaders guarantees that the needs of the followers are achieved and their feedback considered (Saenz, 2011). Followers are supported, advised, coached, encouraged and helped in enhancing the awareness of their own self-competences through feedback. Majority of studies indicated the positive and significant TL-innovative work behavior relationship in different sectors (Al-Omari & Hung, 2012; Sosik et al., 1998; Wilson-Evered, Hartel & Neale, 2001; Eisenbeib & Boerner, 2010; Masood & Afsar, 2017) and based on the above discussion, this study proposes the following hypothesis for testing;

H1: Transformational leadership has a positive relationship with innovative work behavior.

2.5 Quality Culture as a Moderator between Transformational Leadership and Innovative Work Behavior

A moderator is defined as any variable that influences the relationship between two or more variables (Dawson, 2014), with moderation referred to as the effect of the moderator. In relation to this, quality culture forms a part of the organizational culture that reinforces innovative behavior (Amabile et al., 1996; Anderson & West, 1998; Hemlin et al., 2008; Pirola-Merlo, Bain & Mann, 2005; Woodman et al., 1993). Several researchers have shown that innovation requires organizational support and encouragement (e.g., Agrell & Gustafson, 1994; Anderson & West, 1998; Hulsheger et al., 2009). This is because supported individuals perceive the freedom to test novel ideas and methods to achieve goals or to complete tasks (Pirola-Merlo et al., 2005). However, the quality culture topic still lacks clarity and as such, it still calls for extensive research (Mahmood et al., 2006).

In the same caliber of study, Kausar (2014) described organizational culture as a group of organized concerns, shared values, norms and common beliefs that are extensively accepted and shared among employees in an organization. Organizational studies pointed out the influence of culture on the employees' beliefs and its indirect effect on the practices within it (Nahm, Vonderembse & Koufteros, 2004). Quality culture is the pattern of beliefs, and norms in terms of quality and for its achievement, the goals of the organization calls for a positive quality culture for support. In other words, a quality culture requires clear values and beliefs in order to facilitate innovative behavior among employees (Linkow, 1989). This explains why organizations are inclined towards adopting quality programs in order to focus on developing suitable quality culture (Dellana & Hauser, 1999). Nevertheless, the quality culture concept has been largely ignored in literature (Mahmood et al., 2006) and to the best of the researcher's knowledge, quality culture variable has not been thoroughly investigated for its moderating role, particularly in the relationship of innovative work behavior.

Therefore, in the present study, the moderating effect of quality culture is examined in its stimulation of innovative behavior and building of obligations among employees towards HEIs in Iraq. Quality culture accepts that innovation is a crucial value for organizations and it acknowledges norms concerning the current innovation. Consequently, quality culture encourages the development of new innovative solutions and enhancements within the organization, facilitates direct feedback as well as communication channels to bring about tacit knowledge, and it enables independent work of the mission to determine more innovation (Hartmann, 2006). Culture in and of itself is considered as one of the top aspects that influence the lives of the people, their behavior and their thoughts (Hamdan, Belkhouche & Smith, 2008). Thus, quality culture and transformational leadership significantly affects employees (Lok & Crawford, 2004) and the organizational processes (Kitchenham, Pfleeger & Fenton, 1995) and such culture is created and reflected by leaders through their behaviors (Brown & Thornborrow, 1996). In connection to this, Mc Clelland (1975) indicated that leadership who is an advocate of quality culture helps employees to determine problems in a timely manner, and facilitates access to the needed resources via efforts supported by the cooperation of all organizational members (Kitapci, Okten & Suleyman, 2009). Hence, this study proposes the following hypothesis for testing;

H2: The relationship between transformational leadership and innovative work behavior is moderated by quality culture.

Theoretical Framework

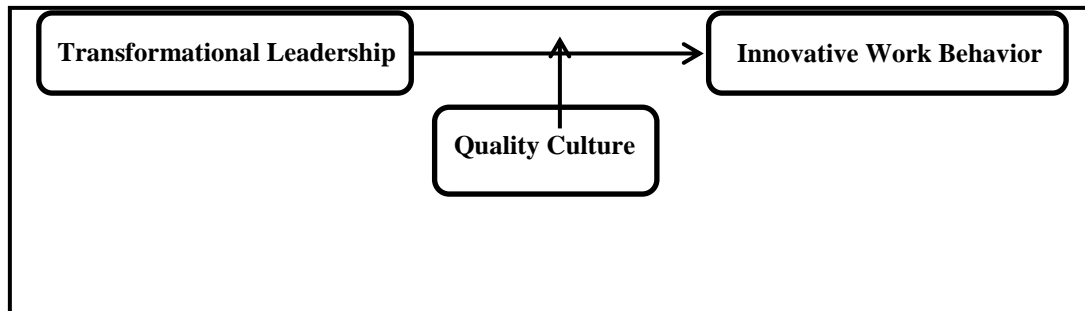


Figure 1. Study Model

3. Method

3.1 Sample and Procedure

The present correlation study is an attempt to provide a description of the relationship among TL, innovative behavior and quality culture. Accordingly, quantitative data was gathered through a survey instrument. The initial questionnaire was translated into Arabic language by back-translation. The researcher then distributed 700 questionnaires by e-mail to three public universities (Baghdad University, Mosul University and Basra University) to the sample obtained through systematic random sampling method. Out of the distributed questionnaires, 315 were returned and deemed usable for analysis.

3.2 Measurement

Innovative work behavior – this variable was measured by nine items adopted from Scott and Bruce's (1994) measure for individual innovative behavior in the workplace, and drawing from Kanter's (1988) study. The measurement scale ranged from strongly disagree (1) to strongly agree (5).

Transformational leadership – this variable was measured by 20 items adopted from the Multifactor Leadership Questionnaire Form 5X (Bass & Avolio, 1995). The scales were converted by Afsar et al. (2014) into one higher order factor to align it with the empirical studies (Avolio et al., 2004) and development of theory (Bass, 1999) regarding transformational leadership.

Quality culture – the measurement of quality culture was adopted from Jallow (2003) and the items were adopted from those developed by prior literature (e.g., Manley, 1998; Detert, Schroeder & Cudeck, 2003).

4. Results

The present study employed SPSS for data screening and PLS was used for data analysis. The data analysis process comprised two phases; the first phase entailed the measurement model, while the second one entailed the structural model. Descriptive statistics were employed to obtain each variable's mean and standard deviation. The obtained mean values ranged from 3.413 to 3.877, with standard deviation ranging from 0.623 to 1.058 (see Table 1).

Table 1.

Descriptive Statistics of the Constructs (n=315)

<i>Construct</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Minimum</i>	<i>Maximum</i>
Transformational leadership	3.566	1.037	1	5
Quality Culture	3.413	1.058	1	5
Innovative Work Behavior	3.887	0.623	1	5

4.1 Measurement Component

The researcher conducted a preliminary PLS analysis with the entire survey items to examine the psychometric properties scales. For the retention of item indicators, three criteria were utilized; first, the factor loadings of indicators related with every construct had to be 0.70 or over to have sufficient reliability (Bagozzi & Youjae, 1988) and second, each construct's composite scale reliability (internal consistency) had to be over 0.70 (the recommended cutoff value). Lastly, the average variance extracted by the latent constructs from their indicators had to be over 0.50 (the recommended cutoff value) as established by Fornell and Larcker (1981). The use of the above elaborated criteria led to the retention of 19 items to measure transformational leadership, 28 items to measure quality culture and 8 items to measure innovative work behavior. The summary of obtained factor loadings of retained indicators, composite scale reliabilities and average variance extracted is presented in Table 2. The measures having sufficient reliability were all retained and included in the study.

Table 2

Summarized factor loadings

Model Construct	Loading	Composite Reliability (CR)	Average Variance Extracted (AVE)
Transformational Leadership (TL)	Above 0.70	0.925	0.780
Quality Culture (QC)	=	0.929	0.765
Innovative Work Behavior (IWB)	=	0.922	0.595

4.2 Structural Model

After analyzing the measurement model, the next step entailed using PLS analysis to investigate the structural model through analysis of the inner model. In this particular analysis, the researcher followed prior studies (Chin, 2010; Hair et al., 2013) established requirements.

4.2.1 Assessment of Variance Explained in the Endogenous Latent Variables

The path coefficients level and significance and the value of R^2 measures were used as the top criteria in evaluating the structural model using PLS-SEM (Hair et al., 2011). In particular, the objective behind prediction-oriented PLS-SEM is to shed light on the endogenous latent variables' variance, with the need for a high R^2 level. Based on the findings, the research model explained 52.2% of the total variance in the innovative work behavior (see Table 3). It can therefore be concluded, based on Chin's (1998) study, that the level of variance explained by the proposed model is moderate, with an acceptable R^2 value.

Table 3

Variance Explained in the Endogenous Latent Variable

Latent Variable	Variance Explained (R^2)
Innovative Work Behavior	52.2%

It is also recommended to obtain the effect sizes of specific latent variables. According to Chin (2010), the determination of such effect sizes influence on the dependent variables via f^2 analysis complements R^2 . Accordingly, the researcher calculated f^2 effect size as it is not readily calculated by PLS. Manual calculation was carried out using the following formula;
 $f^2 = (R^2 \text{ included} - R^2 \text{ excluded}) / (1 - R^2 \text{ included})$

The f^2 values of 0.02, 0.15 and 0.35 are respectively interpreted as small, medium and large effect sizes of the predictive values (Cohen, 1988). On the basis of the study's proposed model, the effect sizes obtained from the specific latent variables and the moderating variable can be obtained by using Cohen's (1988) proposed formula (see Table 4).

Table 4.
Effect Sizes of Latent Variables

Endogenous Variable	Exogenous Variables	R2 included	R2 excluded	1-R2 included	R ² included-R ² excluded	f2 value	effect size Rating
IWB	Transformational Leadership	0.522	0.392	0.478	0.130	0.27	medium
	Quality Culture	0.522		0.478	0.131	0.27	medium

4.2.2 Hypotheses Testing

The last step involved the use of PLS algorithm and bootstrapping algorithm in Smart PLS 2.0 3M to test the hypotheses. Each of the path coefficients significance by indicator's weights and loadings can be obtained through the use of bootstrapping method as recommended by Hair et al. (2012). The hypothesized relationships were tested and the results are displayed in the following table 5.

Table 5

Hypothesized Relationship

No	Hypothesis Relationship	Path coefficient	Standard Error	T. value	P. value	Supported
H1.	Transformational leadership→IWB	0.214	0.05	6.462	0.000	Yes
H2.	Transformational leadership*QC→IWB	-0.349	0.067	5.611	0.000	No

For H1, a positive and significant relationship was found between transformational leadership and innovation work behavior ($\beta = 0.214$, $t = 6.462$), supporting the first hypothesis.

For H2, a negative and significant moderating effect of quality culture was found on the relationship between transformational leadership and innovation behavior ($\beta = -0.349$, $t = 5.611$), rejecting the second hypothesis.

4.2.3 Analysis of the Effect of Quality Culture as a Moderator

This study hypothesized the positive moderating role of quality culture on the TL-innovative work behavior relationship but on the basis of the obtained results, a statistically significant negative value was found ($\beta = -0.349$, $t = 5.611$), $p < 0.0000$, which shows that H2 is rejected (see Figure 2).

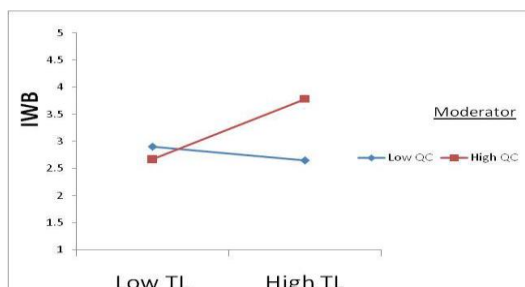


Figure 2 Interaction Effect of Transformational Leadership and Quality Culture on IWB

5. Discussion

The finding obtained regarding the relationship between transformational leadership and innovative work behavior indicate that the former brings about the latter among HEIs staff in Iraq. This finding is aligned with those reported in prior studies (e.g., Afsar et al., 2014; Boerner, Eisenbeiss & Griesser, 2007; Imran & Haque, 2011; Khaola & Sephelane, 2013; Khan et al., 2012).

More specifically, the finding stemmed from the result that showed transformational leadership's significant influence on innovative work behavior ($\beta = 0.214$, $t = 6.462$, $p < 0.01$) at 0.01 level of significance. This type of leadership entails the leaders development of subordinate's trust, respect, risk-taking, commitment and confidence in the organization's vision. Consequently, subordinates' innovative ideas and activities are encouraged (Betroci, 2009; Bass & Riggio, 2012).

Juxtaposing the finding to the Iraqi HEIs, transformational leadership in such institutions could enhance staff morale and provide them with suitable teaching and coaching methods. This leads to the creation of innovative learning opportunities and value diversity and in turn, allows the staff to provide innovative novel ideas. Transformational leaders are supportive using the interactive approach, they mentor, motivate, guide and help their staff while establishing new courses or engaging in academic research. In the Iraqi HEIs, leaders should consider the needs of the academic staff as this would work to obtain their trust and cooperation, their professionalism in teaching, and mitigate isolation. These findings support prior studies in literature such as Zhang and Batrol (2010) and Pieterse et al. (2010). The findings evidence that Iraqi HEIs staff accept the importance of transformational leadership, as this type of leadership garners their respect trust and faith in their leaders.

Moving on to the focused moderating role of quality culture between the TL-innovative work behavior relationship, the results showed that quality culture moderated the relationship in a negative and significant way ($\beta = -0.349$, $t = 5.611$, $p < 0.01$) among Iraqi HEI staff, indicating the rejection of H2. This may be attributed to the workload of academic staff and the additional efforts demanded from them to enhance their innovative work behavior. With the effect of quality culture, the staff is burdened with instructions and additional requests leading to their negative innovative work behavior. Such negative moderating effect of quality culture may also be attributed to the differences in attitudes between transformational leadership and academic staff in addressing and resolving university problems. This result can be explained through the arguments of the social cognitive theory concerning quality culture in that the norms and values of academic staff should be aligned to the organizational goals and mission (Bandura, 1986), only then they exert extra effort to adopt innovative work behavior.

The obtained findings contribute to literature concerning innovative work behavior in several ways; they represent an empirical evidence of the TL-innovative work behavior, with quality culture as the moderating variable, in the context of Iraqi HEIs academic staff. As far as the researcher's knowledge is concerned, this is one of the few studies to empirically examine quality culture's moderating role between the variables.

Moreover, the present study's findings illustrated the importance of transformational leadership in Iraqi HEIs to encourage and maintain innovative work behavior among the staff. In relation to this, universities in Iraq has to work towards encouraging the adoption of transformational leadership style to promote the development of teaching staff and to provide them direction and purpose within an environment that is characterized with mutual trust and respect. Human resources among these institutions should highlight the top leadership assets that inspire innovation engagement, provision of training programs, attending courses, and conducting research projects as well adopting new technologies.

With regards to the study limitations, the findings are concerned only with the perceptions of public universities' academic staff regarding the factors that influence their innovative work behavior. In this regard, future studies are recommended to extent the study to investigate the same variables in other HEI types (private institutions). Also, aside from the examined variables focused on in this study, there are other situational factors (e.g., organizational structure, organizational culture, personal resources and innovation culture) that future studies can include in their examination. Lastly, this study used a cross-section method and as such, future studies can use the longitudinal type of study to explore innovative work behavior issues.

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