

ADVANCING ORGANIZATIONAL CULTURE AS A SUPPORTER OF INNOVATION PROCESSES IN GOVERNMENTAL ENTITIES

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ABSTRACT

Administrative organizations, in general, have peculiarities and features that distinguish them from others. Organizational culture has been linked to the activities of organizations, including administrative innovation, as it is one of the fundamental ways to raise and improve efficiency and effectiveness in service and productive organizations. Organizational culture is a set of values that individuals believe in within organizations, which govern their behavior and affect their performance of the work entrusted to them. Organizational innovation combines brilliant knowledge and creative work, touching all areas of life, dealing with reality, and striving for the best and is the product of the interaction of subjective, objective, personal, environmental, or behavioral variables, led by distinguished people. The purpose of the study is to determine the prevailing organizational culture in Saudi government institutions and its impact on administrative innovation. Specifically, organizational culture was presented as four components (beliefs, values, communication, and organizational standards) and innovation was presented using three components (susceptibility to change, problem-solving and decision making, and innovation promotion). The study also aimed to assess the effect of the individual components of organizational culture on each of the components of innovation.

The questionnaire was completed by 91 respondents. Males and females were equally represented in the study sample. Components of organizational culture had different effects on the components of innovation. The only component that did not show a statistically significant association with innovative performance was beliefs. Our results provide useful information for organizations and institutions, specifically the governmental institutions in Saudi Arabia. Results suggest that innovation can flow in the organizations when organizational culture supports it. Our research also highlights concepts that should be developed within organizations; values, communication, and organizational standards to develop innovation. We also proposed a simple model to describe the dimensions of organizational culture along and the expected effects that should occur if efforts were made to improve the norms for organizational culture within the governmental institutions in Saudi Arabia.

The current study assessed the association between organizational culture and administrative innovation in governmental organizations in Saudi Arabia. The current model also included components that were not sufficiently assessed in previous models such as communication as a component of organizational culture and its role in administrative innovation.

Keywords: Organizational Culture, Administrative Innovation, Governmental Entiti

INTRODUCTION

The organizations' external environment is no longer stable and remarkably constant, but mobility and dynamism have become apparent features. This resulted in the creation of complex and interrelated problems that cast their shadows on labor organizations, and thus these organizations needed to devise solutions to address these problems. However, the creation of solutions does not come by accident. Instead, it requires providing the appropriate environment to create innovations and open horizons for productive imagination. Therefore, attention to innovation has become a necessity for work organizations' success and a reason for their ability to survive and face the successive changes in the external environment (Shahzad et al., 2017).

Administrative organizations, in general, have peculiarities and features that distinguish them from others. This is, of course, due to the difference in the intellectual and cultural patterns that govern organizations' behavior. Thus, each organization has a personality that distinguishes it from the rest of the organizations, and this distinction is a management concept called "organizational culture" (Harel et al., 2020)

For business organizations to ensure the growth of creative capabilities in their surroundings, they must form their organizational culture to be supportive and encouraging of innovation. Simultaneously, the organizational culture and the values and beliefs it contains are what direct individuals' behavior towards what should and should not be done in the work environment (Chen et al., 2018).

Organizational culture as an organizational concept did not appear until recently. While the organizational climate, one of the prominent phenomena is the organized culture that is easy to observe and measure. It has gained the most significant interest from researchers and those interested in studying organizational phenomena (Moran & Lynch, 2017).

However, the organizational climate is only an external aspect of the organization's culture and studying its dimensions may not enable us to understand how the organization operates honestly. It measures whether the expectations of the members of the organization have been met, while the organizational culture measures the nature of beliefs and expectations within the organization, with the beginning of the fifth decade of this century. The shift began from focusing on individuals and the motives of their behavior to more general and comprehensive analysis units such as workgroups and the organization as a whole as an integrated unit that contains many organizational elements that are in a state of continuous interaction with some in addition to their interaction with the surrounding environmental variables. Thinking then began to identify the trends and patterns of organizational behavior that distinguish each organizational unit from the other, based on the principle of the open system, this analytical direction as the theoretical basis on which later studies of the organization's culture were built (Bezzi et al., 2019).

"Kurt Lewin" defined organizational culture as a set of assumptions, beliefs, values, rules, and standards shared by members of the organization, and it is the human environment in which the employee performs his work. It is possible to talk about the culture of the organization in general or the culture of an organizational unit, and culture is something that is not seen or felt but is present and is everywhere, and it is like the air that surrounds everything in the organization and affects it (Burnes & Bargal, 2017). While (Shin & Park, 2019) defined organizational culture in his book "Organizational and Leadership Culture" as the sum of the basic principles that the group invented, discovered, or developed while solving its problems for external adaptation and internal integration, which proved its effectiveness and then taught it to new members as the best way to feel, perceive and understand problems.

Regardless of the variety of definitions of organizational culture, all definitions share a distinctive element: "values". It is the common denominator between those different definitions. These values indicate trends, beliefs, and ideas in a particular organization. Therefore, values are

the basic concept for evaluating the behavior of individuals and their behavior in organizations. These values reach individuals through social relations and continuous interaction between them.

Organizational culture is a set of values that individuals believe in within organizations, which govern their behavior and affect their performance of the work entrusted to them, and these values include power, elite, reward, effectiveness, efficiency, justice, work teams, order. Hence, organizational culture has become an accepted and priority aspect of many contemporary organizations (Ludolf et al., 2017). Many managers give priority and sufficient attention to their organizations' organizational culture because they consider it one of the organization's most essential components. As it determines the organization's success to a large extent, and it creates pressures on the individuals working in it to move forward in thinking and acting in a manner consistent and commensurate with it. That is why the main and important reason for organizations' interest in organizational culture is that it contains the values, ethics, trends, habits, ideas, and policies that guide individuals' behavior and affect their effectiveness and efficiency.

The concept of administrative innovation stems from the general concepts of innovation itself. Innovation in management is related to new ideas in the field of management, product development, team leadership, improving customer services, and all known management functions. In short, administrative innovation is every idea, procedure, or product presented by young and old employees that are characterized by innovation and addition and bring administrative, economic, or social benefits to the organization, individuals, or society (Cerdán & Nicolás, 2017).

There is a close relationship between innovation and excellence, and there are modern approaches to innovation that are permanently linked to achieving government excellence, moreover, by developing creative people's skills to ensure their ability to transform their ideas into innovative projects, as they are the pillars of the desired distinction in quality, leadership, and performance development (Ali Taha et al., 2016).

The concept of future foresight represents an urgent need in the development process. This is to employ its tools to anticipate challenges and find solutions based on innovation to develop services and government work according to a future vision. This includes building positive thinking as a basis for innovation and compatibility with new global transformations and the challenges of the times, preparing plans and programs, evaluating performance to achieve government excellence, applying effective planning methods in practice, and how to follow sound remotely (Zafar et al., 2016). Undoubtedly, enhancing innovation among creative employees will enable them to effectively implement ideas and develop government work to make the Kingdom of Saudi Arabia more innovative. In addition to encouraging them to launch their ideas and discuss them with their colleagues and superiors to transform them into distinct projects that improve performance and achieve customer happiness. Also, prepare plans for innovation based on future scenarios, train these bodies to read variables scientifically, and design integrated systems for future foresight.

Review of Past Studies

According to Bourne & Jenkins (2013), values are common agreements between members of the same social organization about what is desirable or not desirable, good or bad, important or not important. As for organizational values, they represent the values in the workplace or environment, so that these values guide the behavior of workers within the different organizational conditions. Among these values is equality between workers, concern for time management, concern for performance, and respect for others.

They have shared ideas about the nature of work and social life in the work environment, and how to accomplish work and organizational tasks. Among these beliefs are the importance of

participating in the decision-making process, contributing to teamwork, and its impact on achieving organizational goals (Jacobs et al., 2013).

Walton & Kimmelmeier (2012) stated that Organizational norms are standards that workers in the organization adhere to, as they are useful standards for the organization. For example, the organization's commitment not to appoint the father and son in the same organization, and it is assumed that these norms are not written and are obligatory on the subordinates.

Innovation and creativity are necessities in business and enterprise management. As the needs and aspirations grow and expand. It is no longer sufficient or even satisfactory to perform business in the institutions in the traditional routine ways because continuing with them leads either to standing up and thus backing down from the accelerated pace of moving forward or failure (Kline & Rosenberg, 2010).

Therefore, successful institutions, and to ensure their survival and continuity, are strong and influential, they must not stop at the limit of competence, meaning that they are convinced of doing their work precisely or performing the duties entrusted to them honestly and sincerely, despite the importance of this feeling and its sublime. Nevertheless, its ambition should be beyond that. Also, innovation, creativity, and innovation become the hallmarks of its performance and services (Vlok, 2012).

Michelino, et al., (2014) defined innovation as ideas that are new and useful and related to an optimal solution to specific problems, developing methods or goals, deepening a vision, assembling or reconstructing known patterns in managerial behaviors in distinct and advanced forms that jump forward with their owners. However, (Hoerber & Hoerber, 2012) stated that the definition alone does not achieve innovation unless it is embodied in work. Therefore, it can be said that true creativity is in creative work and not in thinking, even if the innovative work is preceded by innovative thinking.

Definitions of innovation vary according to schools of thought, researchers' points of view, and trends, as innovation has been defined according to many considerations, and from definitions of innovation based on the specific characteristics of personality, whether mental or emotional qualities, what Simpson came up with, where innovation is defined as what a person exhibits in terms of disposition. (Becker & Eube, 2018) pointed out that when interested in innovation, people who have minds capable of research, development and authorship should be searched for, and that when discussing the topic of innovation and its meaning, imagination, invention, discovery, and curiosity must be taken into account. According to Guilford, innovation includes a set of mental traits such as flexibility and fluency.

Innovation has been used in three different stages, the first of which is that innovation is a process that includes creativity. It is a process close to the invention, and it was reported that innovation is a creative process it results in a new perception of solving a specific problem, and in the second station they used the term innovation as an important part of the culture of the individual or group that adopts the innovative and creative process, and in the last station they said that innovation means innovation regardless of the method used in that (Namnai et al., 2015).

The importance of the organizational culture of the organization lies in forming the patterns of behaviour and relationships that must be followed by members of the same organization, whether they are its employees or its managers. Also, raising of the ability of the organization to change and proceed with the developments that occur in the organizations around it. Determining the functional behavior expected of individuals working in the organization and determining the nature of their relationships with each other and their relationships with clients. Determine the way employees dress and the language they speak. Moreover, organizational culture maintaining the stability of the organization. Organizational culture is considered an auxiliary and supportive element for the management of the organization and helps it to achieve

its ambitions and goals. It encourages innovation at work and avoiding red tape and blind obedience. Besides, organizational culture directing individuals working in the same organization, and working to organize their work, their achievements, and their relationships with each other. It attracts ambitious, creative, and wanted workers to achieve the organization's goals. It facilitates the management of tasks and reduces cases of resorting to formal procedures for employees to realize the behaviors required of them (Tănase, 2015).

The study of Naranjo - Valencia (2011) aimed to analyze the organizational culture that promotes or inhibits organizational innovation and strategy imitation. The study used a sample of 471 Spanish companies to examine the hypotheses. Using hierarchical multiple regression analysis, the results showed that the organizational culture is influenced by the innovation strategy. The study found that organizational culture is a clear determinant of innovation strategy. Saturation cultures promote innovative strategies and hierarchical cultures reinforce imitation cultures.

Kambiz & Aslan (2014) studied the relationship between organizational culture and innovation. Therefore, the research examined the effects of organizational culture on innovation directly and through organizational learning. The study expected to clarify the result indicating that OL has a complete mediating effect on OC and OI. However, there are still some confusing relationships between OC and OL. Both innovation professionals and the organizational culture need to understand the systemic relationship between these concepts and the value they can generate in creating and maintaining a sustainable competitive advantage for enterprises.

Building on formation theory, (Chen et al., 2018) described fit as a "profile drift", examining the compatibility between an organization's culture and its innovation strategy. Data were collected from 183 Chinese organizations. The study examined the hypothesis that greater alignment between organizational culture and innovation strategy encourages superior innovation speed and innovation quality. The study results provided evidence that, in the group of organizations displaying either an exploratory or exploitative innovation strategy, the more similar the configurations of organizational culture to those of the highest performing, the greater the speed of innovation and the quality of innovation. In the group of organizations that display an ingenious innovation strategy, the alignment between organizational culture and innovation strategy is not closely related to innovation speed and quality of innovation. The study also discussed the implications of applying the appropriate culture - strategy in managing innovation.

The Role of Organizational Culture in Achieving Innovation and Outstanding Performance

The Importance of Organizational Culture in the Success of the Government Sector

It is considered an element that helps the management to achieve its goals and ambitions, when the culture is strong, the majority of the employees of the organization accept it, and they accept its values, provisions, and rules, and they follow all of this in their behaviors and relationships. Organizations that have an adaptive culture that focuses on satisfying and fulfilling the changing needs of customers and workers and shareholders can outperform organizations that do not have such a culture (Dedahanov et al., 2017).

Achieving Innovations and the Culture of the Government Sector

Here we can distinguish between two types of institutions, institutions that follow an innovative strategy, which is the institutions that make innovation a source of their competitive advantage in the market and one of the dimensions of their strategic performance in it, and the second type follows a strategy directed towards the existing situation, *i.e.*, the current technology, products, and services. The innovators and there are many fields and opportunities

for them to do what they have to do in the formation and development of the foundation of innovations. As for the second type, it confronts the innovative activity to maintain the existing state (Ax et al., 2017).

According to Caliskan & Zhu (2020), there is no doubt that leadership plays an effective role in stimulating or impeding innovation within the organization, where leadership is defined as “exercising an influence on the employees (workers) so that they cooperate among themselves to achieve a common goal.” The innovative leadership in the organization is what spread the atmosphere of innovation. There are incentives, while the bureaucratic leadership that maintains the existing situation finds dangerous change that prevails in chaos, and if the first leadership style is characterized by the democratic style, flexibility, freedom from hierarchy and rigidity of structures and rules, and the tendency to work teams and independent units. The second type (bureaucratic) is characterized by centralization and inflexibility.

HYPOTHESES

The hypothetical model for the research is shown in Figure 1. The first axis (organizational culture) is represented by four independent variables. These included: Beliefs (BI), Values (VI), Organizational standards (OS), and Communication (Com). The second axis (administrative innovation) is represented by the following three variables: Problem-Solving and Decision Making (PSDM), Susceptibility to Change (SC), and Innovation Promotion (IP).

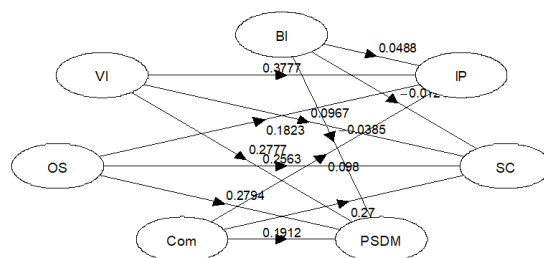


FIGURE 1
PATH COEFFICIENTS FOR THE PARTIAL LEAST SQUARES (PLS) RESEARCH MODEL

H1: There is no statistically significant relationship between organizational culture and innovation.

H1-1: There is no statistically significant relationship between beliefs and innovation.

H1-2: There is no statistically significant relationship between values and innovation.

H1-3: There is no statistically significant relationship between organizational standards and innovation.

H1-4: There is no statistically significant relationship between communications and innovation.

H1-5: There is no statistically significant relationship between organizational culture and problem solving.

H1-6: There is no statistically significant relationship between organizational culture and susceptibility to change.

H2: There is no statistically significant relationship between the respondents' attitudes about the organizational culture dimensions prevailing in Saudi government institutions due to demographic variables.

H3: There is no statistically significant relationship between the respondents' attitudes about the prevailing level of administrative innovation among workers in Saudi government institutions due to demographic variables.

SCOPE OF THE STUDY

Organizational culture is an extension of the prevailing societal culture, and therefore the individual's functional behavior is not generated from a vacuum but instead is the product of

community behavior, negatively or positively. Every organization shows an organizational culture through the interaction of a set of factors that crystallize over time to form a unique culture of the organization that distinguishes it from others. The culture of the organization expresses the pattern of general behaviors, rules of behavior, and beliefs that the workers within the organization convince and adopt in their dealings, and it also includes practices and habits that are entrenched with time to form thinking styles that affect the methods of decision-making and methods of accomplishing work (Al-Sada et al., 2017). As well as expressing employees' values and behaviors that are touched and observed by dealers with the organization. This culture has an effective impact on the performance of the organization's members and the organization's overall performance. Governmental institutions need to know the prevailing organizational culture in them because of this importance in explaining workers' behavior in those institutions and the resulting impact on their productivity (Saad & Abbas, 2018). The study's scope can be shown in determining the prevailing organizational culture in Saudi government institutions and its impact on administrative innovation.

Governmental institutions strive to achieve their goals through the use of modern and effective administrative methods. It is also concerned with developing its employees' performance. Among the recent trends of most institutions is the concern for organizational culture, which is an integral part of the institution's organizational climate and an influential element in workers' organizational behavior.

SIGNIFICANCE OF THE STUDY

The study's importance stems from the practical aspect of government institutions' importance that carry out the business of a private and commercial nature, which are difficult to present through private institutions. Governmental institutions need in their management a particular method, financially and administratively, in their actions. Most of them also need an administrative environment that helps them think strategically, particularly define a clear vision to improve their services and outputs and citizens' satisfaction. All this necessitated it to provide the appropriate environment and instill the values that encourage innovation among its employees, as it is one of the fundamental ways that help it in pursuing the changes and steadfastness in front of the successive changes.

Hence, the researcher hopes that this study will contribute to government institutions' practical reality by creating an environment that encourages administrative innovation through the influence of a crucial element: the organizational culture. That is by identifying the prevailing values that make up the organizational culture, which gives officials the ability to instill values that encourage innovation and discard values that do not encourage it. In addition to identifying the characteristics of administrative innovation available to workers in these institutions, it helps define the characteristics that need to be developed among workers to reach the desired level of employee innovation.

METHODOLOGY

Research Approach

A quantitative research approach was used to answer the research questions. Quantitative research deals with statistics and numbers. On the other hand, qualitative research is involved with words and meanings. The quantitative approach can be used to test the research hypotheses through data collection in a systemic way such as a questionnaire. Data collection is followed by data analysis to answer the research questions (Williams, 2011). Quantitative research is usually expressed in summary measures such as counts and percentages or mean \pm standard deviation.

Quantitative analysis is used to test or confirm assumptions and theories. The results can be used to establish generalizable facts about a topic. Common quantitative methods include lab experiments, clinical trials, observations recorded as numbers, and questionnaires with closed-ended questions. The qualitative methods can be used to explore ideas and experiences in-depth and are usually conducted using open-ended questions and focus groups as well as thematic data analysis (Martínez et al., 2018).

Data Collection Methods

Two main data sources were used for data collection. The first source was primary or previously validated surveys in the literature. These were used for quantitative data collection to test the research hypotheses (McNaughton & Cowell, 2018). The second source was secondary data (literature review of studies and published journals and articles) which were used to develop the theoretical framework of the study. We searched previous literature for validated surveys that can be used to collect data related to the measurement scales and items of interest for the current study. The selected surveys were modified, and questions were rephrased to fit the context of the study.

Research Design

A cross-sectional design was employed in the current study. In literature, a cross-sectional study (also known as prevalence study or transverse study) is an observational study that can be used to analyze data from a representative sample or subset at a specific point in time. Such an approach was suitable for the current study as we were interested in studying the association between variables at one-time point.

Target Population

The selected Governmental Entities for this study will be from the ministry of foreign affairs, ministry of interior, ministry of media, Saudi Arabia press agency, ministry of culture, The Diriyah Gate Development Authority. The questionnaire was used to collect data from both senior and junior representatives in Governmental Entities. Simple random sampling was used for data collection. Responses were collected from 92 respondents. Simple random sampling provides an excellent and non-biased selection of the Governmental Entities for the study. Moreover, the probability sampling technique will guarantee that the study members will be randomly chosen to avoid or restrict the one-sided portrayal (Parfitt, 2005).

Data Analysis

Quantitative data is based on numbers. Simple math or more advanced statistical analysis is used to discover commonalities or patterns in the data. The results are often reported in graphs and tables. Applications such as Excel, SPSS, or R can be used to calculate things like average scores, counts and percentages, correlation, or causation between two or more variables, and the reliability/validity of the results.

Data Re-coding

Data was exported from excel into SPSS 26 and recoded as follows: responses for Likert scale items were coded on a scale from 1 to 5 where 1 represents strongly disagree and 5 represents strongly agree. The gender, age, education, profession, and experience years were coded as numerical values, and labels were then provided. The SPSS was further exported in R

for further data analysis such as partial least squares structural equation modelling, reliability, and validity analysis.

Descriptive Statistics

Counts and percentages were used to summarize the distribution of the categorical demographic variables. Bar charts were used to visualize the results where appropriate. Continuous variables (latent variables) were summarized using means and standard deviations and categorical variables such as demographic characteristics were summarized using counts and percentages. Pie charts were used to present the distribution of age, gender, education, profession, and years of experience. Bar plots were used to present the results for Likert scale items. The median, maximum, and minimum were also presented for the Likert scale data. The relative importance of the nine variables was calculated using the formula proposed by Cooper and colleagues (Cooper et al., 2006):

$$\text{Class width} = \left(\frac{\text{Upper limit} - \text{Lower limit}}{\text{number of classes}} \right)$$

Based on the range for Likert scale items used in the study (lower limit=1 and upper limit=5), the class width was identified as 1.33 based on three classes (low, moderate, and high importance). Thus, the mean values from 1 to 2.33 were indicative of a low level of importance, values from 2.34 to 3.67 were indicative of a medium level of importance, and mean values from 3.68 to 5 indicated a high level of importance.

Normality Test

Skewness and Kurtosis of the nine latent variables were tested. The value for skewness is indicative of the symmetry of the distribution while the value for kurtosis is indicative of the peakedness of the distribution (Pallant, 2010). Based on previous literature (George & Mallery, 2016), Skewness and Kurtosis values between -1 and +1 are considered excellent, while values that range from between -2 and +2 are considered acceptable.

Correlation between Latent Variables

Pearson's correlation was used to test H1. Correlation is a bivariate measure of the strength of association between two continuous variables. The sign (+ or -) indicates the direction of the relationship. The value of the correlation coefficient (r) ranges from +1 and -1 (Pallant, 2010), with a value of zero indicating no association. A correlation coefficient of 1 or -1 indicates a perfect linear association (Hair Jr et al., 2014). We used cut-off values for the correlation that was proposed by Cohen (Cohen, 1988). A correlation coefficient (r) that ranges from 0.1 to 0.29 indicates small correlation strength while values that range from 0.3 to 0.49 indicate medium strength. Values from 0.5 to 1.0 indicate high strength of association. Pearson's correlation was used to answer the first research question. The correlation between each pair of constructs was tested. A total of seven constructs were included in the analysis (four components of AOC and three components of AI). The magnitude and strength of association between each pair were tested.

Association between Demographic Characteristics, AOC, and AI

Univariate analysis was used to assess factors associated with AOC and AI. Unpaired t-test and one-way ANOVA were used to test H2 and H3. These two tests are parametric tests that can be used when the dependent variable is continuous and the independent variable is

categorical with two and more than two levels, respectively. Unpaired t-test was used to assess the association between factors with only two levels (e.g., gender) and the average scores for the seven included components of axes 1 and 2. The t-statistic was used to test the statistical significance of the results (Brown & Melamed, 2012).

One-way ANOVA was used to assess the association between demographic characteristics with more than two levels (e.g., experience years and age) and the calculated scores for each of the seven components. The F-statistic was used to test the statistical significance of the results (Judd et al., 2018). Statistically significant results were followed by post hoc pairwise comparisons with Tukey correction to compare the distribution of the components of axes 1 and 2 between each pair of levels. The scores for the seven components were computed by averaging the scores for the corresponding items. Demographic characteristics were used as the independent variables in the model.

ANALYSIS OF RESULTS AND INTERPRETATION

Objective	Hypothesis	Sub-hypothesis	Result
To investigate the effect of organizational culture on administrative innovation	H1: There is a statistically significant relationship between organizational culture and innovation.	H1-1: There is a statistically significant relationship between beliefs and innovation promotion.	Not supported
		H1-2: There is a statistically significant relationship between values and innovation promotion.	Supported
		H1-3: There is no statistically significant relationship between organizational standards and innovation promotion.	Supported
		H1-4: There is a statistically significant relationship between communications and innovation promotion.	Not supported
		H1-5: There is no statistically significant relationship between organizational culture and problem-solving.	Supported
		H1-6: There is no statistically significant relationship between organizational culture and susceptibility to change.	Supported
To investigate the association between sociodemographic characteristics and organizational culture	H2: There is a statistically significant relationship between the respondents' attitudes about the organizational culture dimensions prevailing in Saudi government institutions due to demographic variables.	There is a statistically significant relationship between the respondents' attitudes about the organizational culture dimensions prevailing in Saudi government institutions due to gender	Not supported
		There is a statistically significant relationship between the respondents' attitudes about the organizational culture dimensions prevailing in Saudi	Not supported

		government institutions due to age	
		There is a statistically significant relationship between the respondents' attitudes about the organizational culture dimensions prevailing in Saudi government institutions due to education	Supported
		There is a statistically significant relationship between the respondents' attitudes about the organizational culture dimensions prevailing in Saudi government institutions due to experience year	Supported
		There is a statistically significant relationship between the respondents' attitudes about the organizational culture dimensions prevailing in Saudi government institutions due to profession	Not supported
To investigate the association between sociodemographic characteristics and administrative innovation	H3: There is a statistically significant relationship between the respondents' attitudes about the prevailing level of administrative innovation among workers in Saudi government institutions due to demographic variables	There is a statistically significant relationship between the respondents' attitudes about the prevailing level of administrative innovation prevailing in Saudi government institutions due to gender	Not supported
		There is a statistically significant relationship between the respondents' attitudes about the prevailing level of administrative innovation prevailing in Saudi government institutions due to age	Not supported
		There is a statistically significant relationship between the respondents' attitudes about the prevailing level of administrative innovation prevailing in Saudi government institutions due to education	Supported
		There is a statistically significant relationship between the respondents' attitudes about the prevailing level of administrative innovation prevailing in Saudi government institutions due to experience years	Not supported

		There is a statistically significant relationship between the respondents' attitudes about the prevailing level of administrative innovation prevailing in Saudi government institutions due to profession	Not supported
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Concepts of Organizational Culture and Innovation

In the current study, we used four latent variables to represent organization culture: beliefs, values, communication, and organizational standards. Other studies used different scales to represent organizational culture. Repetti & Wang defined organizational culture as the behavior norm and common values of a group of people. They further defined behavior norms as the persistent and common behavior of this group of people (Repetti & Wang, 2017). Johnston and Marshall defined organizational culture as the common principle of an organizational member or some valuable characteristics in an organization (Johnston & Marshall, 2013).

On the other hand, (Baah, 2015) defined organizational culture as the common behaviors and values of all organization members, which did not simply affect the inner thoughts of the employees but also affected the performance of the employees (Baah, 2015). To add to these, another research defined organizational culture as the enterprise-related value, the belief that is formed and shared by employees in an enterprise, where corporate culture was cultivated evolved among employees (Arena et al., 2015). These approaches were consistent with the definition used in the current study. We regarded organizational culture as a combination of values, beliefs, and organizational standards that are shared by the employees of the organization. Furthermore, we regarded communication as an essential component of the organization's culture.

Innovation is the most effective tool to achieve increasing competitive power, economic success, and sustainable profitability. Kirner investigated the performance of product innovation and processes of technology firms of various sizes (low, medium, and high), identifying strengths and weaknesses of specific innovations from low-tech companies (Kirner et al., 2009). Abhishek highlighted the ten attributes of innovation derived from the literature search (Abhishek, 2009). There are two types of innovation: incremental and radical. Incremental innovation is the type that ultimately leads to a gradual improvement in the performance and efficiency of a process, product, or system. Radical Innovation is the type of innovation that can have a major impact on the industry and cannot be achieved by traditional management practices. It also requires unique cultural management and climate (Alm & Jönsson, 2014).

It is important to mention that there is a wide dispersion of references regarding the concepts of innovation. Perhaps this is because the theme belongs to an area of recent study or lacks theoretical consolidation. The study also provided evidence to show a lack of a tight theoretical body to develop research linking service innovation and performance. The absence of such a theoretical framework for research indicates that authors must acquire information from different sources and include references from alternative research fields for service innovation (Ferraz & Santos, 2016). (Sears & Baba, 2011) further stated that the innovation literature is fragmented and had no holistic perspective (Sears & Baba, 2011). Other authors argued along the same line and showed that innovation in services has always been fragmented, regardless of the increase in literary contributions in recent years (Gallouj & Savona, 2010). This might explain why innovation was defined in simpler terms compared to other studies. In the current study, we used three dimensions to classify administrative innovation: Problem-solving and decision making, susceptibility to change, and innovation promotion.

Based on previous research, the concept of organizational behavior can be represented by four main concepts: communication, beliefs, values, and organizational standards, while three main concepts can represent innovation: problem-solving and decision making, susceptibility to change, and innovative promotion. The current research hypothesized that healthy organizational culture would be associated with better innovative procedures.

Association between Organizational Culture and Innovation

The current research aimed to investigate the relationship between organizational culture and innovation by including respondents who work in various types of organizations. The respondents did three main professions: supervisory administrative work, non-supervisory administrative work, and technical works. We also included an equal number of males and females to assess whether gender was associated with organizational culture and innovation. Okatan and colleagues conducted a study to assess the association between organizational culture and internal innovation capacity. The study assessed the correlation between organizational culture and the dimensions of the internal innovation system. The study examined and compared the world's most innovative companies to other various innovative companies. The authors found that organizational culture dimensions had a statistically significant effect on internal innovation system dimensions. Most importantly, organizational leadership had the highest effect and was the most contributing dimension to internal innovation system dimensions (Okatan & Alankus, 2017).

These results are consistent with the results from the current analysis, where we showed that organizational culture had a positive effect on innovation dimensions. Moreover, the various dimensions of organizational culture affected the dimensions of administrative promotion differently. Hauser also developed a conceptual model to assess the effect of organizational culture on the process of innovation. Their results suggested that organizational culture plays an important role in innovation (Hauser, 1998), similar to what was observed in the current study.

The current study revealed some interesting findings. Organizational beliefs did not show a statistically significant association with any of the components of innovation. However, the current research also revealed some interesting findings. For example, effective communication was associated with two main components of innovation: susceptibility to change and problem-solving. Previous research showed that internal communication is important as it facilitates continuous change. However, research regarding the association between communication and organizational innovation is lacking. In specific, innovation at the employee level was not the focus of research in the public and non-profit sectors, although evidence has shown that innovation at the employee level positively affects organizational innovation (Dover & Lawrence, 2012; Windrum & Koch, 2008). Furthermore, little is known regarding the different effects of communication on innovation across the three sectors, especially in an international context.

Communication is important for both stakeholders and employees. For stakeholders, communication is important to understand organizational changes and directions. Kuchi stated, "the more stakeholders hear and learn about why and how an organization is moving in a particular direction, the lesser conflicts there will be between stakeholders and the organization's understanding of programs and priorities" (Kuchi, 2006). For employees, communication is important to understand their employing organizations' strategies, build trust with senior management, and gain knowledge and information (Al-Ghamdi et al., 2007; Byrne & Lemay, 2006). Thus, the current research adds to the existing literature in this area that was not properly explored before.

Effect of Organizational Culture on Organizational Innovation in the Public Sector

The public sector should be encouraged to create a flexible and open organizational culture to enhance its innovation capability to meet people's expectations and compete with the private sector that is distinguished by its innovative characteristics. Communication is also important in the public sector to enable organizational learning (Tang & Yeh, 2015). It is also recommended that the public sector engages in holistic thinking while promoting new services to improve organizational innovation. In terms of innovative capability, the public sector faces some restriction that limits its margin of change compared to the private sector. However, it should be noted that the public sector is capable of building organizational culture and can undertake its creation from such aspects to enhance performance and innovation.

As previously mentioned, organizational culture had a positive effect on the components of organizational innovation. Taking the public sector (government) as an example, it is essential to assess whether such association holds in such context. To study such association, Tang conducted a questionnaire-based study to assess how organizational culture can ultimately affect organizational performance through organizational innovation. The authors used structural equation modeling to answer the research question. However, the study included two other factors not included in the current study: leadership style and organizational learning. A total of 398 responses were included in the analysis. All responses came from public sector organizations in Taiwan.

LIMITATIONS

The current study had several limitations. First, the association between organizational culture and innovation was assessed using self-reported measures which can introduce bias into the results. However, our results are on par with other objective studies that assessed the effect of innovation on performance. Second, we did not assess leadership styles and their effect on innovative promotions as other studies did. This was because the main focus of the current study was to investigate the effect of organizational culture on innovation. We also did not investigate the same structure of organizational culture and innovation that were studied previously which might introduce confounding due to variables that were not measured in the model. However, the current structure was chosen as it includes some components that were the focus of interest in previous research such as communication as a component of the organization. We recommend establishing a cause-effect relationship through future research by using a suitable study design.

PRACTICAL IMPLICATIONS

Our results have some important implications that can be useful for organizations and institutions specifically those in Saudi Arabia. Results suggest that innovation can flow in organizations when organizational culture supports it. Our research specified some concepts that should be developed within organizations; values, communication, and organizational standards to develop innovation. Our proposed model presents aspects of organizational culture along with the expected effect of these aspects of various components on innovation.

SCOPE FOR FUTURE RESEARCH

The current structure was chosen as it includes some components that were the focus of interest in previous research such as communication as a component of the organization. We recommend establishing a cause-effect relationship through future research by using a suitable study design. We also recommend conducting future studies with large sample size and

evaluating other components that may affect administrative innovation such as leadership style and organizational learning which were not assessed in the current study. Future efforts should also be directed to assess whether the effect of organizational culture on administrative innovation vary by the type of governmental organization. The moderating effect of organizational type should be explored using further research.

CONCLUSION

The current study adds to the existing literature regarding the relationship between organizational culture and innovation. We showed that various components of organizational culture positively affect the innovative performance of the organization. Components of organizational culture had different effects on the components of innovation. The only component that did not show a statistically significant association with innovative performance was beliefs. Organizational values showed a statistically significant association with problem-solving and were the key driver for innovation promotion. Communication showed a statistically significant association with problem-solving and susceptibility to change.

On the other hand, organizational beliefs did not show a statistically significant association with administrative innovation components. Organizational standards showed a statistically significant association with problem-solving, susceptibility to change, and innovative promotion. Results also suggest that successful communication is the key driver for better problem-solving. Efforts should be directed to raising awareness regarding the importance of these concepts to develop an innovative environment and provide better tools for organizations to prosper.

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