Exploring Lean Management And Organizational Culture: Insights From Department Managers In The Iraqi Ministry Of Interior

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Abstract:

Background: The Iraqi Ministry of Interior plays a crucial role in maintaining security and order within the country. However, there is a need to evaluate and understand the variables of agile management and organizational culture among department managers in order to enhance their effectiveness and improve the services provided to society.

Aims: The study aims to build measures for these variables and identify their reality among department managers.

Method: The research methodology includes a descriptive approach using surveys and correlational studies. The research sample consists of 300 department managers, representing 9% of the total population. The data was processed using the statistical package SPSS.

Results: The findings indicate that department managers in the Iraqi Ministry of Interior exhibit a high level of agile management and organizational culture.

Conclusion: In summary, this research sheds light on the significance of agile management and organizational culture among department managers in the Iraqi Ministry of Interior. The findings and recommendations of this study can contribute to improving the overall effectiveness and efficiency of the ministry's operations and services.

Keywords: Lean Management, Organizational Culture, Department Managers, Iraqi Ministry of Interior, Measurement Tool

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I. Introduction:

The studies and scientific research in the field of sports provide important foundations and principles for achieving benefits and tasks for all state institutions and societal sectors by relying on the scientifically studied facts, which are often highly objective. Therefore, the studied scientific approach is the basis for achieving high achievements in any institution or sector that serves its community. It is undeniable that the process of preparing the members of the Ministry of Interior and selecting department managers in this institution is one of the most important challenges faced by workers in the security field.

Physical education sciences have recently received significant attention from all segments of society due to their great importance and usefulness for everyone, especially the current sample of department managers in the Ministry of Interior, which necessitated numerous changes (Khatsaiuk et al., 2021; Atmaja et al., 2022; Prontenko et al., 2020).

Lean management is a modern methodology for leading organizations and institutions, which avoids waste of effort, time, and money through an integrated system of professional teamwork to achieve the desired goals. It has economic, political, social, cultural, and environmental dimensions, encompassing all aspects of life (Uriona Maldonado et al., 2020; Bouranta et al., 2022; Agyabeng-Mensah et al., 2020). Therefore, it has gained the interest of thinkers, researchers, academics, and students around the world who seek to understand the nature of lean management, its forms, tools, goals, and its impact on the lives of individuals and communities. It is worth mentioning that it is impossible to separate or isolate any aspect of lean management from the others, as they complement each other. There are several forms of lean management, including political, economic, social, and cultural (Shafiq, & Soratana, 2020; Debnath et al., 2023; Othman, & Abdelrahim, 2024).

Both management and culture are concepts characterized by the highest levels of generality. The field of technology has become one of the important and beneficial fields for studying and understanding phenomena and revealing the relationships between them. Due to the nature of this science, it serves all other sciences in

various fields, as it possesses the means, devices, technologies, and modern learning systems. Therefore, it was necessary for this field to intersect with other fields of humanities such as education, psychology, and other educational sciences. Since physical education is an integral and important part of general education, it has been greatly influenced by this field (Lam et al., 2021; Gollakota et al., 2020; Vahdat, 2022).

Organizational culture is also one of the distinctive characteristics of an organization and individuals. The organizational culture refers to the deep structure that is derived from the values, beliefs, and assumptions held by individuals within the organization. Common values are the foundation for the organization to fulfill its functions, as they maintain the organization as a cohesive unit and give it its distinct identity. Organizational culture is a set of assumptions, beliefs, values, rules, and standards shared by the members of the organization (Akpa, et al.,2021; Aryani, & Widodo, 2020; Ababneh, 2021; EL-Makarem, 2023).

The organizational culture of department managers in the Ministry of Interior is a fundamental pillar of the security process and a cornerstone within it. A good department manager who possesses an organizational culture helps to have the desired impact on his colleagues and those accompanying him, including the members of the institution and his community (Almatrooshi et al.,2020; Ashikali, & Groeneveld, 2015; Bowers et al., 2017). They work on developing different professional capacities and skills for themselves and the members through organizing the appropriate professional environment in light of the needs and previous experiences of the members. In addition, they work on equipping the members with self-work methods that enable them to continue acquiring knowledge, building capacities, and acquiring security professional performance skills, as well as instilling various ethical and social values in themselves. The current study sample has specific specifications that enable them to perform in an outstanding manner, which contributes to the quality of the service provided by them and thus achieves the set goals of the institution they work in. Therefore, the importance of research lies in the positive and significant role of the variables represented by lean management in achieving a high level of organizational culture among department managers in the Iraqi Ministry of Interior.

Research Problem:

Due to the scientific advancements in various fields of life and considering that the directorates of the Iraqi Ministry of Interior are the key to maintaining social security, stability, and combating crime, it is essential for these departments to keep up with modernity and utilize different technologies. Additionally, it is crucial for them to possess a sufficient cultural level to positively interact with society, improve their work, and have a strong organizational culture and lean management skills for their department managers. This will enable them to be well-prepared at all times to fulfill their duties and meet the specific physical and administrative requirements of their profession. All of these factors contribute to the development of a strong organizational culture and lean management, which in turn enhances the services provided to the security institution, individuals, and the community as a whole.

Research Objectives:

Develop scales for measuring lean management and organizational culture among department managers in the Iraqi Ministry of Interior.

Identify the levels of lean management and organizational culture among department managers in the Iraqi Ministry of Interior.

Research Scope:

Human Scope: Department managers in the Iraqi Ministry of Interior.

Time Scope: From [2021] to [2023].

Spatial Scope: Directorates of the Iraqi Ministry of Interior.

II. Materials And Method

The researcher utilized a descriptive survey methodology with a correlational approach. This methodology was chosen as it seeks to identify the conditions and relationships between the observed phenomena and reality. By collecting data from members of the community, it aims to assess the current state of the community across various variables. This methodology was deemed suitable as it aligns with the research's specifications and facilitates the achievement of its objectives.

Sample

The research community consisted of department managers affiliated with the agencies of the Iraqi Ministry of Interior, totaling 3,300 department managers. A sample of 30 department managers was selected for the survey, representing 0.9% of the population. Additionally, a sample of 150 department managers was chosen to construct the measurement scales for lean management and organizational culture, representing 4.5% of the

population. Furthermore, a main research sample of 300 department managers was selected, representing 9% of the population (table 1).

Table 1: Distribution of Research Population and Sample

Main sample members	Sample exploratory experiment	Sample for Scale Development	Main Population
300	30	150	3300
09 %	0.009 %	0.045%	%

Measurements:

In this study, various tools were employed to gather data and explore the research objectives. Firstly, the survey method was utilized, allowing for the collection of information from a large number of participants through structured questionnaires. This approach facilitated the acquisition of quantitative data, providing valuable insights into participants' perspectives and experiences. Secondly, in-depth interviews were conducted to delve deeper into participants' thoughts, beliefs, and experiences. These qualitative interviews allowed for a more nuanced understanding of the research topic, capturing rich and detailed information. Lastly, both experimental tests and observations were employed to gather additional data and observe participants' behaviors and reactions under controlled conditions. The combination of these tools - surveys, interviews, experiments, and observations - enabled a comprehensive and multifaceted approach to data collection, enhancing the study's validity and enriching the overall findings.

Statistical analyses:

The researcher employed the Statistical Package for the Social Sciences (SPSS) as a tool for data processing and analysis in the study. The package was utilized for various statistical procedures, including calculating the mean (arithmetic average) of the data, determining the standard deviation to assess the dispersion or variability around the mean, examining skewness to evaluate the asymmetry of the data distribution, conducting independent samples t-tests to compare the means of two separate groups, and performing one-sample t-tests to compare the mean of a single group with a known value.

Procedures

Procedures for Measuring Lean Management and Organizational Culture

The Iraqi Ministry of Interior requires the researcher to construct two scales for lean management and organizational culture according to the following steps:

Identifying the objectives and purposes of the scales:

The objective is to develop research tools that are concerned with measuring the variables of lean management and organizational culture. The purpose is to understand the level of lean management and organizational culture within the sample.

Identifying the domains of the scales:

After reviewing the relevant references and sources related to the concept of lean management and organizational culture, seven domains were identified for the lean management scale. These domains include visual management, technology utilization, quality programming, continuous improvement monitoring, work organization, waste elimination, and timely productivity. Additionally, eight domains were identified for the organizational culture scale. These domains encompass teamwork and sense of belonging, participation in decision-making, shared vision determinants, shared cultural standards, self-development and growth, commitment and respect, encouragement of job creativity and innovation, and positive competition. To assess the validity of these domains, the researcher presented them to a group of experts in management, organization, testing and measurement, general psychology, and sports psychology, as part of a questionnaire. The experts were asked to evaluate the importance of each domain. After collecting and statistically processing the data from the questionnaires, the relative importance values were extracted.

After collecting the questionnaires and data entry, the domains that received less than 75 in terms of importance or less than 53.57% in terms of relative importance were excluded. This decision was based on the opinions of 14 experts and specialists. Tables 2 and 3 illustrate the excluded domains.

Table 2: Degree of Importance and Relative Significance of Domains in the Lean Management Scale

Domains	Importance level	%	Acceptance	nomination
			Yes	No
Visual management	55	39		V

Use of new technology	130	93	V	
Quality programming	60	43		V
Pursue continuous improvement	65	46		V
Organization of work	65	46		√
Eliminate waste	125	89	$\sqrt{}$	
Productivity on time	110	79	V	

Table 3: Degree of Importance and Relative Significance of The Domains in the Organizational Culture
Scale

Domains	Importance level	%	Acceptance	nomination	
			Yes	No	
Teamwork culture and a sense of belonging	120	86	√		
Participation in decision-making	130	93	V		
Shared vision determinants	60	43		V	
Shared cultural standards	50	36		V	
Self-development and growth	110	79	√		
Commitment and respect for time	60	43		√	
Encouragement of job creativity and innovation	135	96	√		
Positive competition	65	46		√	

Developing the initial formulation of the two scales:

To develop suitable measurement items for the domains of lean management and organizational culture among department managers in the Iraqi Ministry of Interior, the researcher formulated 30 items for lean management and 40 items for organizational culture. These items were evaluated by experts, resulting in the modification and deletion of some items. The four-alternative response format (Strongly Agree, Agree, Disagree, Strongly Disagree) was adopted. After analyzing the opinions of 14 experts, 28 items remained for measuring lean management and 32 items for measuring organizational culture.

Assessment of Clarity and Time Required: Preparing Scales for Implementation:

In order to assess the clarity of instructions, items, and response alternatives among department managers in the Iraqi Ministry of Interior, as well as to determine the time required to answer the items and identify any difficulties or obstacles that the researcher may encounter during the application of the scales on the construction and pilot sample, the scales were administered to a sample of 30 managers randomly selected from within the community on Monday, January 9, 2023.

Application of the Scales on the Construction Sample:

After completing the stages of constructing the lean management scale consisting of (3) domains and (31) items with (9) additional objective response items, and the organizational culture scale consisting of (4) domains and (35) items with (10) additional objective response items, the researcher implemented them on the construction sample comprising (150) department managers. The application took place between February 12th and February 16th, 2023. Subsequently, the researcher transcribed and statistically analyzed the completed questionnaires to assess the efficiency of each item in the scales.

Assessing Response Objectivity: Repetition of Items in Educational and Sports Research:

The researcher employed a commonly used approach in educational and sports research, which involves repeating a set of items to assess the objectivity of participants' responses to the scale items. Three items from the lean management scale and four items from the organizational culture scale were tested. Similar items with different formulations and tables were formulated to examine this.

Table 4: Sequence of Original and Repetitive Items for Domains of the Lean Management Scale

Domains	Original Items	Repetitive Items	
Domain of new technology adoption	1	29	
Domain of Waste Elimination	4	30	
Domain of Timely Productivity	18	31	

Table 5: Sequence of Original and Repetitive Items for Domains of the Organizational Culture Scale

Domains	Original Items	Repetitive Items
Teamwork culture and a sense of belonging	2	33
Participation in decision-making	5	34
Self-development and growth	8	35
Encouragement of job creativity and	22	36
innovation		

To assess the objectivity of participants' responses, the following procedures were undertaken:

- 1. Calculation of the differences between the scores of the original and repetitive items for the similar items in each questionnaire.
- 2. Calculation of the absolute differences between these scores for each individual in the sample.
- 3. Calculation of the mean and standard deviation of the sums of these absolute differences.
- 4. The mean and standard deviation were aggregated to determine the critical score at which responses from any individual in the sample would be accepted or rejected. After applying the procedures, the calculated mean and standard deviation for the lean management scale were 2.46 and 0.574, respectively. When combined, the critical score for the scale was determined to be 3.034. Similarly, the calculated mean and standard deviation for the organizational culture scale were 3.22 and 0.658, respectively.

When combined, the critical score for the scale was determined to be 3.878. As the construction sample consisted of 150 department managers, we had a total of 150 questionnaires. Upon reviewing the questionnaires, it was found that 5 questionnaires were deemed invalid as they were not fully answered by the department managers and were thus disregarded. Additionally, 10 questionnaires were neglected when subjected to response objectivity and compared to the critical score. This was due to the absolute differences exceeding the critical score. As a result, the number of valid questionnaires for statistical analysis became 135.

Scale Scoring:

Both the lean management and organizational culture scales were formulated with positively oriented items and four alternatives. We assigned weights (4-3-2-1) to the items based on the response sequence. To understand the nature of the sample's responses to both scales, a correction key specifically designed for this purpose was used. The correction key serves as the tool used by the examiner to identify responses indicating the presence of the measured outcome. Consequently, the highest score achievable for the lean management scale is 112, while the lowest achievable score is 28. For the organizational culture scale, the highest achievable score is 128, and the lowest achievable score is 32.

Statistical Analysis of Items:

Ensuring the quality of scales relies on analyzing and assessing each item's effectiveness. Methods such as item discrimination and internal consistency coefficients help determine item suitability and homogeneity.

Two-group Comparison Method:

To assess the discriminative power of items in the lean management and organizational culture scales, several steps need to be followed:

- 1. Arrange the scores obtained by department managers in the Iraqi Ministry of Interior for each item in descending order, from highest to lowest.
- 2. Calculate the mean and standard deviation of the scores for the upper and lower groups.
- 3. Take a proportion of (27%)* from the top and bottom of the score distribution to form the upper and lower groups, consisting of 36 items each. After following these steps, the researcher used the independent samples t-test to examine the differences between the means of the two groups for each item separately. The calculated (T) value represents the significance of the item's discrimination between individuals in the two groups. The analysis results indicated significant discriminative power for all items in the lean management and organizational culture scales, as the calculated (T) value was compared to the critical value of (1.994) at a significance level of 0.05 and degrees of freedom (70).

Internal Consistency Coefficient:

The researcher employed a different method to assess the efficiency of items in the lean management and organizational culture scales, distinct from the previous two-group comparison method. This method involves calculating the correlation coefficient between the item score and the total score of the domain to which the item belongs. Additionally, it examines the relationship between the item score and the total score of the scale to which the item belongs. The researcher calculated the Pearson correlation coefficient for all 28 items in the lean management scale and 32 items in the organizational culture scale. The results indicated that all calculated correlation coefficients between item scores and domain scores were significant when compared to the critical correlation value at a significance level of 0.05 and degrees of freedom (133), which was 0.169.

The statistical analysis of the correlation coefficients between item scores and the total scores of the lean management and organizational culture scales revealed significant correlations for all coefficients. This is because the calculated correlation coefficients were larger than the critical correlation value at a significance level of 0.05 and degrees of freedom (133), which was 0.169.

III. **Results:**

The Psychometric Properties of the Scales:

Validity and reliability are considered essential psychometric properties of psychological and educational scales, regardless of their purpose of use. It is crucial to ensure these properties and conditions to guarantee the quality and suitability of the measurement and evaluation tools.

Validity of the Scales:

Scale validity refers to the accuracy and appropriateness of the scale in measuring the intended construct without measuring any other construct alongside it.

The researcher assessed the validity of the lean management and organizational culture scales for department managers in the Iraqi Ministry of Interior by calculating the content validity index. Initially, the scales were presented in their initial form to a group of experts and specialists to confirm the validity of the scale items in measuring the intended construct. Through statistical analysis of the scale items, the construct validity was established using the two-group comparison method and the internal consistency coefficient, which is one of the most common types of validity in educational and sports research. This was achieved by calculating the Pearson correlation coefficient between the item score and the total score of the domain to which the item belongs, as well as the item score and the total score of the scale to which the item belongs.

The researcher extracted the Pearson correlation coefficient between the item score and the total score of the domain for the construction sample, which consisted of 133 individuals. The results showed that all correlation coefficients for the lean management and organizational culture scales were significant, confirming the alignment of the items with their respective domains. Furthermore, the researcher examined the relationship between the item score and the total score of the scales, and all correlation coefficients were found to be significant, indicating the alignment of the items with the scales.

Reliability of the Scales:

The concept of reliability is fundamental in educational and psychological measurement. A reliable measure is one that is consistent and dependable, meaning that an individual's score does not change significantly with repeated administration of the measure or the consistency of results within the measure itself.

To assess the reliability of the lean management and organizational culture scales, the researcher used the split-half method and the Cronbach's alpha coefficient.

Split-half method:

In this method, the entire scale is administered, and then it is divided into two equal halves during scoring. The goal is to ensure the equality of the means and variances in both halves. Typically, the first half includes the items with odd numbers, while the second half includes the items with even numbers. The scores of each half are summed separately, resulting in two scores for each participant.

The researcher employed the odd-even method and divided the 28 items of the lean management scale and the 32 items of the organizational culture scale into two halves. The first half included the items with odd numbers, while the second half included the items with even numbers. After confirming the homogeneity of the two halves using an (F) test for the lean management and organizational culture scales, the analysis proceeded.

By applying the formula for the split-half method, the calculated (F) value for the lean management scale was 1.123, and the calculated (F) value for the organizational culture scale was 1.133. These values were smaller than the critical (F) value of 1.30 at a significance level of 0.05, with degrees of freedom (134-134). This confirms the randomness of the differences between the two halves of the lean management and organizational culture scales and indicates a good level of homogeneity.

Next, the researcher calculated the Pearson correlation coefficient between the halves of the two scales. The correlation coefficient for the split-half of the lean management scale was found to be 0.724, and the correlation coefficient for the split-half of the organizational culture scale was 0.733. Since these values represent the reliability of the two scale halves, the researcher used the Spearman-Brown formula for adjustment to obtain the overall reliability values. The reliability coefficient for the lean management scale was 0.839, and the reliability coefficient for the organizational culture scale was 0.845. This confirms that both scales have a high level of reliability and can be considered trustworthy.

Cronbach's Alpha coefficient:

This type of reliability is called internal consistency and is one of the most commonly used and suitable coefficients for measuring scales. It indicates the "strength of the relationships between items within the scale." The idea behind this method relies on the extent of correlation among items within the scale, as well as the correlation of each item with the overall scale. The average of the internal correlation coefficients among the items determines the Cronbach's Alpha coefficient.

The researcher applied the Cronbach's Alpha formula to the sample of 135 department managers in the Iraqi Ministry of Interior using the Statistical Package for the Social Sciences (SPSS). The results showed that the reliability coefficient for the lean management scale, using the Cronbach's Alpha method, was 0.852, and the reliability coefficient for the organizational culture scale was 0.861. These are indicators of high reliability, and they can be considered trustworthy.

The main experiment of the research:

After completing the measurement of physical fitness through the respective tests and constructing the lean management scale consisting of 28 items, the organizational culture scale consisting of 32 items, and the administrative creativity scale consisting of 34 items for the department managers in the Iraqi Ministry of Interior, the researcher proceeded to administer them to the participants of the main research sample, consisting of 300 department managers, on a specific day within the period from March 5th to March 30th, 2023.

Upon completing the physical tests and scales administration, the researcher collected the questionnaires and organized the data for further statistical analysis.

Presentation of Initial Data Analysis Results for Research Variables:

After measuring the variables of lean management and organizational culture using the relevant scales and obtaining the data from the participants in the main experiment, consisting of 300 department managers in the Iraqi Ministry of Interior, the researcher aimed to present the primary data for the research variables. The researcher sought to extract descriptive statistics indicators, including the mean, standard deviation, standard error, skewness, maximum value, and minimum value for all study variables.

The results of the statistical analysis revealed that the skewness coefficients for all variables were close to zero, indicating a symmetrical distribution of the research sample. Additionally, the standard error values indicated an appropriate sample size for statistical analysis. Table 6 provides further details on these findings.

Domains	Sample Size	Minimum Value	Maximum Value	Means	SD	Standard Error	Skewness Coefficient
Lean Management	300	67.00	109.00	85.33	10.62	0.61	0.24
Organizational Culture	300	72.00	125.00	98.18	13.58	0.78	-0.02

Assessment of lean management levels among department managers in the Iraqi ministry of interior: scale construction, analysis, and inference:

After completing the construction of the lean management scale and administering it to the participants of the main research sample, consisting of 300 department managers in the Iraqi Ministry of Interior, which included three domains and 28 items, the researcher aimed to extract the mean and standard deviation values for the scores of the department managers in each domain of the scale. Subsequently, the hypothetical mean value of the scale, which was 70 points, was calculated. The researcher then conducted an inference regarding the significance of the differences between the achieved mean and the hypothetical mean of the scale. This was accomplished by employing a one-sample t-test as a statistical tool to assess the level of significance and determine the reality of lean management among the department managers in the Iraqi Ministry of Interior (table 7).

Table 7: Comparative Analysis of Significance: Achieved Mean versus Hypothetical Mean of Lean Management Scale.

Sample size	T Value Tabular Calculated		DDL	Hypothetical mean	SD	Mean	Sig
	Tabular	Calculated					
300	1.96	28.86	299	70	10.62	85.33	Significant

Through table (7), it is evident that the difference favors the achieved mean of lean management. This indicates that the level of department managers' scores on this variable is above average, as the calculated T-value (28.86) is greater than the tabular value (1.96) at a degree of freedom (299) and under a significance level of (0.05). The researcher believes that there are various social and environmental circumstances that lead the department managers in the Iraqi Ministry of Interior to perceive themselves as competent, accomplished, and multi-talented. When they develop this concept and possess a high level of self-esteem, coupled with upbringing methods employed by security institutions that encourage the creation of a generation with good levels of lean management, it is evident that security institutions, despite their small size, work towards common goals, fostering a sense of belonging and loyalty.

The Reality of Organizational Culture Level:

After constructing and implementing an organizational culture scale on a research sample of 300 department managers in the Iraqi Ministry of Interior, the researcher calculated the mean and standard deviation of their scores. A one-sample t-test was conducted to determine the significance of the difference between the achieved mean and the hypothetical mean of the scale (set at 80 points). The analysis revealed a statistically significant difference between the two means, indicating variations in the organizational culture among department managers (table 8).

Table 8: The Significance of Differences between the Achieved Mean and the Hypothetical Mean of the Organizational Culture Scale.

Sample size	T Value		DDL	Hypothetical	SD	Mean	Sig
	Tabular	Calculated		mean			
300	1.96	23.18	299	80	13.58	98.18	Significant

Through table (8), it is evident that the difference favors the achieved mean, indicating that the level of organizational culture is above average. The researcher attributes these differences to the higher achieved mean among department managers in the Iraqi Ministry of Interior compared to the hypothetical mean of the scale.

IV. Discussion:

Our study aimed to build measures for these variables and identify their reality among department managers.

Our results have shown a high level of lean management that can be explained by the fact that department managers in the Iraqi Ministry of Interior have achieved a level of mental, cognitive, social, and ethical maturity (Mahmoud et al., 2021; Adler et al., 2012). This maturity enables them to have a broader perspective on life, moving away from a narrow, selfish view to a social perspective that takes into consideration the feelings and emotions of others. As a result, their behavior based on this perspective leads to psychological and social harmony, ultimately leading to a high level of management. Additionally, reaching a stage of responsibility as a department manager means that they have achieved significant career aspirations, which enhances their self-perception, identity, and personality (Nielsen et al., 2016; . Klein et al., 2023; Olga, & Valeria, 2018).

Furthermore, it has shown in our study, that the department managers demonstrate a high level of organizational culture, characterized by their pursuit of personal achievement and excellence in administrative work. Their extensive service in the Iraqi Ministry of Interior contributes to their strong listening, dialogue, and communication skills. The manager's attitudes and responses are influenced by the emotions of love and hatred towards the culture of teamwork and their sense of belonging to the group. The group dynamic plays a vital role in achieving common goals and satisfying individual needs within the organization (Van Dun et al., 2017; Burawat, 2019; Tan et al., 2023).

Besides, our results demonstrated that, by actively participating in collective decision-making and demonstrating a sense of responsibility, department managers exhibit a lack of need for supervision. They possess the ability to encourage creativity and innovation in their profession. Creativity, being the process that generates new outcomes through interaction and the use of novel approaches, enables excellence, differentiation, and greater flexibility (Guidotti, & Ricci, 2021; Santhiapillai, & Ratnayake, 2021; Rejikumar et al., 2020).

In the same context, organizational culture tends to emphasize initiative and individuals' precedence over specific rules and procedures, while maintaining an open mindset towards accepting new ideas with minimal resistance that hinders innovation and initiatives. In order for security institutions to achieve this, there is a need to reduce rigid work rules and guidelines. Managers who perceive a high level of perceived organizational support feel indebted to the security institution and, therefore, have a need to reciprocate with positive attitudes and behaviors towards the organization. These behaviors include enhancing productivity, fostering innovation, embracing a culture of self-improvement, and demonstrating commitment and respect for time (Adeniy et al., 2024; Ababneh, 2021; Anggoro, & Anjarini, 2024).

V. Conclusion:

The study's findings led to several conclusions. Firstly, the researcher successfully developed measurement tools to assess and define lean management and organizational culture among department managers in the Iraqi Ministry of Interior. Secondly, it was observed that department managers in the ministry possess a high level of both lean management and organizational culture. This indicates their proficiency in implementing lean principles and their commitment to fostering a positive organizational environment.

VI. Recommendations:

Based on the study's results, the researcher has put forward several recommendations:

- 1. Utilize the findings of this study, particularly the measurement tool, to assess lean management and organizational culture among department managers in the Iraqi Ministry of Interior.
- 2. Conduct similar studies that incorporate additional psychological and social variables among department managers in the Iraqi Ministry of Interior.
- 3. Conduct studies that encompass the variables examined in this study across other security institutions and include larger samples for a more comprehensive analysis.

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