



Evaluation of the Organizational Efficiency of Audit Firms Based on Leadership Style

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ABSTRACT

Efficiency is the essence of an organization that can guarantee organizations' stability and survival and is a mechanism for gaining a competitive advantage. Leadership style is a set of attitudes, traits, and skills of managers formed based on the four factors of the value system, trust in employees, the leader's tendencies, and a sense of security in ambiguous situations. Therefore, the present research evaluates audit firms' organizational efficiency based on leadership styles (relationship-oriented and task-oriented) in 2019. The variables of organizational identity, individual effectiveness, and organizational commitment have also been used as mediating variables in the research. The present research method is the descriptive-survey type, and the statistical population is the managers of public and private sector audit firms. Ahmadi Harisi Farahmand's (2015) standard questionnaire was used to measure organizational efficiency, and a task-oriented and relationship-oriented leadership style questionnaire was used to measure leadership style. Data analysis is performed by the structural equation method using SPSS and PLS3 software. Findings show that a significant relationship between relationship-oriented leadership style and organizational efficiency in the public sector with an acceptable significance coefficient is confirmed. However, it is rejected in private sector audit firms. In contrast, the existence of a significant and negative relationship between task-oriented leadership style and organizational efficiency in the private sector with an acceptable significance coefficient is confirmed. However, it is rejected in the public sector.

Keywords:

Organizational Efficiency, Leadership Styles, Audit Firms, Organizational Commitment.

1. Introduction

Organizations in any society, using their limited resources, somehow meet people's individual and group needs in society. Since production resources are always faced with one feature, scarcity, often the main purpose of organizations is to the optimal use from the factors of production and achieving effectiveness. These factors include land, capital, human resources, technology, and management. In the meantime, human resources are the most valuable asset of organizations and have a high sensitivity. According to the country's vision document, the country's economy, which is currently (according to official statistics), is set to become a knowledge-oriented economy. One of the ways to achieve this goal is to improve efficiency. The legal actions of policymakers and executors on the issue show that one of the serious challenges in the Iranian public sector is the issue of efficiency, and improvement policies of efficiency are the way out of this situation in order to achieve superior opportunities in the domestic and foreign arenas (Mehregan et al., 2019).

Based on theoretical knowledge and studies, among the important factors related to efficiency in today's organizations, especially audit firms, is the subject of leadership and the style used in the organization. Therefore, applying the leadership style component can be effective in leadership effectiveness and directly play a role in improving employees' level of efficiency and effectiveness. Every organization needs a specific leadership style, and managers undoubtedly know that their success depends on the human resources in the organization. This idea leads them to seek the appropriate leadership style in managing the organization's affairs and then improving the organization's efficiency. In fact, an appropriate leadership style is a facilitating and motivating factor for employees that directly and indirectly affects their behavior. Applying a special attitude and a special leadership style in organizations, including audit firms, can guarantee organization's the growth and development. Therefore, studying in this field can help increase the awareness and knowledge of audit firms about different leadership styles and improve their ability to make the right interventions and decisions. Researchers have proven that leaders can make a difference in an organization. A strong leader with special abilities can create an organizational culture. Leaders instill in their followers that they know the

right way, ask them to work to identify their leadend to achieve the desired position that he has specified. Managers' leadership style reflects how they interact with their employees. Examining leadership styles is an effective factor in increasing the effectiveness, efficiency, and, ultimately, efficiency of organizations. Therefore, this study seeks to find effective factors in improving audit firms' efficiency based on different leadership styles. What style should audit firms adopt towards their employees in order to create maximum efficiency in the organization? Based on studies in this field, this research evaluates organizational efficiency based on two leadership styles (task-oriented and relationship-oriented) in audit firms. This study also examines the relationship between each of these styles with organizational efficiency, the relationship between each of these styles concerning mediating variables (organizational identity, individual effectiveness, and organizational commitment) with organizational efficiency as well as examines the relationship between organizational identity and organizational commitment variables with the individual effectiveness of auditors working in audit firms.

This study aims to identify more literature and theoretical framework related to psychology on the one hand and behavioral research in the field of audit on the other hand and to examine the relationship between leadership style and efficiency of public and private sector audit firms. The difference between this study and previous research in the field of audit as well as psychology in Iran is the investigation of differences in leadership styles in public and private sector audit firms and its effects on efficiency in those organizations, which no such study has been conducted in these two areas in other research. Lack of sufficient research in this field, as well as the importance of the issue of leadership style used in organizations, motivated the authors of this article to address the issue of leadership styles and efficiency in public and private sector audit firms concerning three mediating variables of organizational identity, individual effectiveness, and organizational commitment. The results of this study can lead to greater awareness of the society of certified public accountants, auditors and audit firms, both public and private, the Securities and Exchange Organization, investors, students, accounting and audit researchers, and other users of financial statements about effect of

leadership styles on the organizational efficiency in audit firms. The results of this research are expected to have the following scientific achievements:

First, research evidence will show whether the task-oriented and relationship-oriented leadership styles are the same in audit firms of public and private sectors. This issue, as a scientific achievement, can provide useful information to legislative firms in society. Second, this article can give readers a better understanding of audit firms' efficiency, both public and private. Third, this study's results can suggest new ideas for conducting new research in the field of audit. The theoretical foundations, variables, and testing of research hypotheses are examined and analyzed in the following.

2. Theoretical Foundations

2.1. Efficiency

Efficiency is the essence of an organization that can guarantee organizations' stability and survival and is a mechanism for gaining a competitive advantage. Human has faced a problem called limitation of resources and facilities in all ages. Because a country's resources are generally limited, increasing efficiency is important as a basic necessity for improving a nation's standard of living. Efficiency is a comprehensive concept that its increase has always been considered by politicians, economists, and statesmen as a necessity to improve the standard of living, greater welfare, peace, and comfort of society (Smith, 2001). Efficiency is an intellectual perspective that always strives to improve what already exists. Improving efficiency requires efforts to adapt economic activities to constantly changing (Mehregan et al., 2019). If a healthy and productive organization has a human resource that is always waiting to be told what to do, it can never overcome its problems. People need to know how to maximize their efficiency, manage their time, and stay organized. The index of a healthy and productive organization is the presence of people who have the necessary skills to turn programs into actions that lead the organization to its goals. In fact, in order to increase its efficiency, an organization must provide the necessary ground productivity of its human resources. The International Labor Organization has classified the factors affecting the organization's efficiency into two main groups of internal and external factors. Leadership style and management are

some of the internal factors and a subset of soft factors. Also, the results of previous research show that the most important factors affecting efficiency in audit firms are immediate manager leadership style, proper performance appraisal system, the proper performance of the immediate manager and his acceptance by employees, providing side benefits to employees, carrying out group work in the firm, employee participation in the management of the firm, paying attention to the basic needs of the employees. In this research, considering the important and effective factors in the efficiency of audit firms, audit firms' efficiency is evaluated based on the leadership style of that organization.

One of the factors for success and achievement of organizational goals depends on management practices and effective managerial leadership styles. The manager in the organization's leadership role can choose different styles in leading the human resources and the organization. Appropriate behavioral patterns of the manager in any organization cause strong morale and motivation in employees and increase their job satisfaction. Managers can increase job satisfaction, organizational commitment, and efficiency of their organization using the right leadership style (Mossadegh Rad, 2005, p. 3). Therefore, another variable that this article examines is leadership style.

2.2. Leadership Style

According to Daniel Gelman, leadership is about influencing others by applying behavioral-emotional styles (Fakhimi, 2004, p. 224). Leadership style is the pattern of behavior that the leader shows when directing others' activities (Hershey and Blanchard, 2004, p. 85). After presenting different definitions of leadership, Bush and Coleman (2005) concluded that leadership is the process of influencing the leader (e.g., cognitive, emotional, the behavioral performance of leaders at different levels of individual, group, and organizational) on individuals or groups. Therefore, the people who influence others can play a leadership role in the organization. That person is considered a leader, and the others are in the subordinate organization (quoted by Abbasian, 2011, p. 39). The leadership style of management determines the culture space and strategies of the organization. Leadership style is a set of attitudes, traits, and skills of managers formed based on the four factors of the value system,

trust in employees, leadership tendencies, and a sense of security in ambiguous situations. Researchers have proven that leaders can make a difference in an organization. In general, research and theories related to leadership are divided into four groups, including theories of personality traits, behavioral theories, contingency theories, and new leadership theories. The present study is in the field of behavioral research. In behavioral theories, researchers seek to identify the behavioral traits of managers. That is, instead of trying to find out what things can make the managers of the organization successful, they tried to find out what works can make the managers successful. Leadership style is the manager's attitude towards his role and that of his employees. Traditionally, there have been two perspectives on leadership style:

- 1) Command and traditional (task-oriented) style: The manager or leader tells his subordinates what to do and how to do it. This is a conservative (authoritarian) style.
- 2) Democratic (relationship-oriented) style: In this style, the leader or manager shares his leadership's responsibility with his subordinates and participates in their planning and implementation. This style is also called employee-oriented or relationship-oriented.

There are other types of leadership styles between these two modes, which are called the middle style. In the middle style, the manager is conservative towards some aspects of the management job and liberal towards other aspects (participatory-integrated) (Rezaian, 2008). There are different leadership styles in the field of psychology. In this article, Bardens and Metzkas (1969) leadership style is used in two groups, including task-oriented and relationship-oriented.

2.3. Individual Effectiveness

Effectiveness is the key to the organization and managers, by creating favorable and successful conditions and opportunities in the work of organizations, implicitly consider effectiveness more than efficiency necessary (Alvani, 1992). Effectiveness is the degree of consistency of the results obtained from performance with the organization's desired results (Behrangi and Tabatabai, 2009). Managers in any organization measure employees' effectiveness according to the performance of their employees through performance appraisal processes. Since the effectiveness of success is defined based on

the organization's predetermined goals, the behavioral characteristics of individuals are an influential factor in achieving this success (Sadeghi, 2003). In other words, individual effectiveness is the establishment of a degree of quality to achieve predetermined goals (Plami et al., 2012). Undoubtedly, moving towards organizational goals depends on achieving the individual effectiveness of employees in organizations. No organization can succeed without the effort and commitment of its employees. Therefore, organizations need highly effective employees to achieve their organizational goals (Zakerfard, 2011, p. 14). However, the existence of highly effective employees is influenced by different factors.

2.4. Organizational Identity

Organizational identity is one of the variables that are very important in helping to ensure the performance of employees in the interests of the organization, so the concept of organizational identity has become a basic concept in the field of organizational behavior and, in general, has attracted increasing attention in management research (Mazaheri, 2017). Studies on organizational identity acknowledge that organizational identity, as a psychological state, reflects the underlying relationship between employees and the organization and can potentially explain and predict many behavioral trends in the workplace (Albert et al., 2000). Organizational identity is a special form of social identity based on the institutionalization of the characteristics, goals, and successes of the organization by employees and having a sense of belonging to it (Viting, 2006). Undoubtedly, one of the main factors in creating employees' belonging and attachment to their organizational identity is the managers and their constructive role concerning the organization's employees. The choice of leadership style has a special priority. Employees with higher organizational identities are more productive, more motivated, and satisfied and are less likely to leave the organization than employees with lower organizational identities. Organizational identity, which refers to the psychological connection between the individual and the individual's work organization, has primarily gained increasing attention from the relationship between behavior and increasing organizational efficiency. It is assumed that the person who acquires identity from the organization works naturally for the organization (Uchi, 1980).

2.5. Organizational Commitment

Organizational commitment as a mediating variable represents the force that requires the individual to stay in the organization and work with belonging to achieve the organization; that is, organizational commitment is associated with a series of productive behaviors. A person who has a high organizational commitment stays in the organization, accepts its goals, and shows much effort and even self-sacrifice to achieve those goals. The three-component model of organizational commitment has caused much empirical research. According to this model, organizational commitment consists of three components:

Emotional commitment: This part of organizational commitment is defined as belonging to an organization determined by accepting organizational values and the desire to stay in the organization.

Continued commitment: It comes from understanding the increasing costs lost in an organization. Lost costs are the costs of an activity or project that are not recoverable. So if one has a continued commitment, one will be sensitive to such increased costs.

Normative commitment: Normative commitment is defined as a perceived duty to support the organization and its activities and expresses a sense of obligation to remain in the organization that people think so that continuing to be active and supporting the organization is a duty on their shoulders.

2.6. Research Background

Mehregan et al. (2017) designed a dynamic turbulence model to develop human resource efficiency in the Iranian oil industry. Findings of the model, considering the current situation, show that insufficient attention to the transparency of the structure of the oil industry in terms of power and the use of intellectual and human capital in terms of value and motivation of employees in terms of beauty has led to many injuries for the efficiency of human resources in the oil industry. In this study, the application of combined policies in three subsystems of value, power, and beauty was selected as the best solution to improve human resources' efficiency in the oil industry. It was shown that planning to increase intellectual and human capital, structural transparency

of the oil industry, and the motivational system of oil industry employees have significant effects on increasing the added value of human resources and improving human resources' efficiency in the oil industry.

Jalali Farahani et al. (2017), studying 285 employees of the Ministry of Sports and Youth, pointed to organizational culture's effect on human resource efficiency. They suggest that organizational learning and human resource efficiency in organizations increase by changing organizational culture and undesirable and ineffective characteristics.

Soleimanpour Omran, and Bagherpour (2016), in a study with a statistical population of 148 employees of the Ports and Maritime Organization, concluded that ability, talent, education, and skills affect the efficiency of human resources.

The results of research by Karimi Shahabi et al. (2016) indicate that in the efficiency model of Iranian public organizations, among the main factors, environmental factors are the most influential, and individual factors are the most impressive. Also, the work conscience variables, which is a subset of individual factors, the priority of efficiency and priorities governing the current situation, were recognized as the main obstacle to Iranian public organizations' efficiency.

Solminihac and Rodrigo (2017) examined the efficiency of copper mining. The results of this study show that a 10% change in wages leads to a 6.2% decrease in production, and also a 30% change in energy prices leads to a 4.8% decrease in labor efficiency. They also concluded that a 20% increase in copper prices had a 4.5% increase in efficiency.

Yépez (2017) conducted a study entitled financial conditions and labor efficiency over the business cycle. The results showed that labor efficiency is highly dependent on changes in the structure of the global economy. He shows the labor efficiency on this dependence with dynamic models that have been obtained from the effect of economic factors on labor efficiency for consecutive years. The effect of organizational structure on improving efficiency has also been obtained in Honari et al. (2006). They have also confirmed the positive relationship between human resources efficiency and motivation.

Chang et al. (2012), in a study entitled the source of bank efficiency growth in China, calculated the efficiency index for bank inputs using the

comprehensive data analysis method. In this study, inputs of fixed assets, capital, and employees and inputs of loans and other assets have been used to calculate the efficiency index. The results show that technical advances in efficiency growth have reduced total factors of production and efficiency in the studied period.

Sarraf and Rokhchakar (2015) explained the relationship between transformational leadership styles, organizational culture, and performance and efficiency (prerequisites for sustainable performance of public and private sector organizations). The result showed that leadership style and transformational leadership style affect organizational culture and performance, and there are clear and significant relationships between the three components of this study.

Jafari and Najafi (2017) investigated the effect of leadership style on human resource performance mediated by organizational silence to increase efficiency. The results showed that transformational and exchange leadership style has a positive and significant relationship with organizational performance. Organizational silence has a negative relationship with organizational performance. Transformational leadership increases performance through organizational silence, and exchange leadership reduces performance through organizational silence. Transformational leadership has a negative relationship with organizational silence. Exchange leadership has a positive relationship with organizational silence.

Nasiri Valik Bani and Sepahvand (2016) examined the relationship between organizational identity and security-oriented leadership style with the job performance of Bu-Ali Sina University employees. They found that there is a positive and significant relationship between organizational identity and security-oriented leadership style with the job performance of employees of Bu-Ali Sina University.

Sadegh Amal Nik et al. (2015) investigated the relationship between leadership style and job characteristics with efficiency in an organization's employees with advanced technologies. The results showed that job characteristics play a significant role in predicting efficiency. There is a negative and significant relationship between leadership style (from employees' point of view) and efficiency. There is a positive and significant relationship between

leadership style (from managers' perspective) and efficiency.

Maria and Rochaa (2019) conducted a study entitled leadership styles and skills developed through game-oriented learning. Findings showed that a game-oriented learning method is an effective approach in developing leadership skills and its basic skills are motivation, facilitation, coaching, mindset change, and communication. A notable innovation of this research was comparing the process between game conditions and organizational life, which led to the creation of a kind of leadership.

Khalid Arar and Nasra (2019) conducted a study entitled leadership style, occupational perception, and organizational citizenship behavior in Israel's Arab education system. The research hypothesis was that leadership style (transformational or exchange) directly and indirectly affects OCB (through occupational perception). These hypotheses are tested on data collected from 620 Israeli-Arab teachers. The results show that transformational and exchange leadership does not directly affect OCB. The occupational perception indirectly affects the relationship between transformational leadership and OCB, and occupational perception does not mediate the relationship between exchange leadership and OCB.

Mazaheri (2017) conducted research entitled the study of the mediating role of organizational identity in the relationship between job security and employee performance, a case study of the Semnan Social Security Organization. The results showed a significant relationship between job security and organizational identity with the organizational performance of employees. There was also a significant relationship between job security and organizational identity, and organizational identity plays a mediating role in the relationship between job security and organizational performance.

In his research, Mousavi, Seyed Hamid (2017) examined the relationship between organizational identity and emotional commitment with job performance and the mediating role in a competitive environment (Case study: Shahroud Tax Office). Findings showed that identity and emotional commitment have a positive and significant relationship with job performance. The competitive environment component can also increase the intensity

of the effect of identity and emotional commitment on employees' job performance.

Khoshnood (2014), in a study, has examined the leadership styles and effectiveness of employees. The results of this study show that management style predicts employee effectiveness. Management style predicts employee capability. Capability by controlling management style predicts employee effectiveness. Capacity mediates the relationship between management style and creates effectiveness.

Majdi and Mohammadi (2016), in a study entitled the study of the relationship between social capital and individual effectiveness of bank employees, concluded a direct and significant relationship between social capital and employee effectiveness.

Homayounpour et al. (2016), in a study entitled predicting effectiveness from the humanistic leadership style, found that there is a positive and significant relationship between leadership style variables (relationship-oriented and task-oriented) and the effectiveness of managers. Among the two leadership styles (relationship-oriented and task-oriented), only the task-oriented leadership style could predict part of the variance of the effectiveness of managers of sports organizations in Isfahan.

Abdelhakeem et al. (2017) in a study, studied the effectiveness of internal audit in the public sector of Bahrain. The results indicate that internal audit independence in the public sector has many weaknesses, including employee shortages, professional incompetence, and low effectiveness. A small number of auditors have high-level skills and training. This study shows that there is a positive and significant relationship between internal audit performance and internal audit effectiveness.

Research by Shue et al. (2016) shows that auditors' expertise and self-efficacy significantly affect their performance. They found that experience is one of the most important factors in audit performance and that the auditor's expertise can improve professional judgment.

Shabri Abd et al. (2016) conducted a study to empirically examine the effect of organizational culture, leadership style, and auditor performance on organizational commitment and its effect on the performance of internal public auditors in Indonesia. This study showed that organizational culture and leadership style have directly or indirectly affected

internal public auditors' performance through organizational commitment.

Banimahd and Nejati (2016), in their study, concluded that whenever the auditor is male, work commitment also increases. Also, if the auditor's workplace is a private audit firm, the work commitment will increase. Since the work experience variable has a positive relationship with work commitment, they concluded that as individuals' experience in the audit profession increases, their commitment to audit work increases.

The results of Mousavi Kashi and Zahedi (2016) indicate that there is a significant relationship between job satisfaction in terms of demographic variables such as gender, marital status, job category, service history, and age in audit firms. So that the level of job satisfaction in men is higher than women, and married auditors are higher than single auditors. Also, lower satisfaction has been seen in senior auditors than the manager and supervisor.

Fayyazi and Yousefian Arani (2015), in a study entitled the effect of social weakening on organizational commitment and job involvement, concluded that social weakening applied by colleagues and supervisors significantly reduced job involvement and organizational commitment in two dimensions of emotional commitment and normative commitment in employees but, as expected, does not have a significant effect on employees' continued commitment.

Darat et al. (2016) in their study mentioned a phenomenon called organizational commitment, which indicates that the employees do not leave the organization or, in other words, they adhere to the organization, so the question is posed that, is there an unknown part of the employees that keeps them in their organization? Do employees who are committed to their organization exhibit deviant behaviors in the workplace? Committed employees are less likely to leave the organization. Therefore, they show higher work performance (Lee et al., 2004) and are less prone to deviant behaviors than others (Holtom et al., 2012). Because they feel responsible for their organization and, as a result, are less inclined to violate organizational norms (Darat et al., 2016).

3. Methodology

3.1. Statistical Population and Sample Size

The statistical population of the present study is the managers working in the audit firms of the audit organization (public sector) and audit firms of the society of certified accountants (private sector). The sampling method is random. To determine the minimum sample size in the PLS method proposed by Barclay et al. (1995), the minimum sample size is equal to the largest value obtained from the following two rules:

- 1) $10 \times$ the number of indices of the measurement model with the highest index among the main research model's measurement models.

- 2) $10 \times$ the maximum relationships in the structural part of the main research model related to a variable.

Accordingly, according to paragraph 1, the individual effectiveness with 30 items has the highest index among other research variables; the multiplication of this number in 10 will be equal to 300. On the other hand, according to paragraph 2, most of the relationships in the conceptual model of research are related to individual effectiveness and organizational efficiency, which has five relationships with other research variables, the multiplication of 5 in 10 will be equal to 50. According to the mentioned rule, the minimum sample size required to use the PLS3 method in this research is 300 samples.

The conceptual model of the research is as follows:

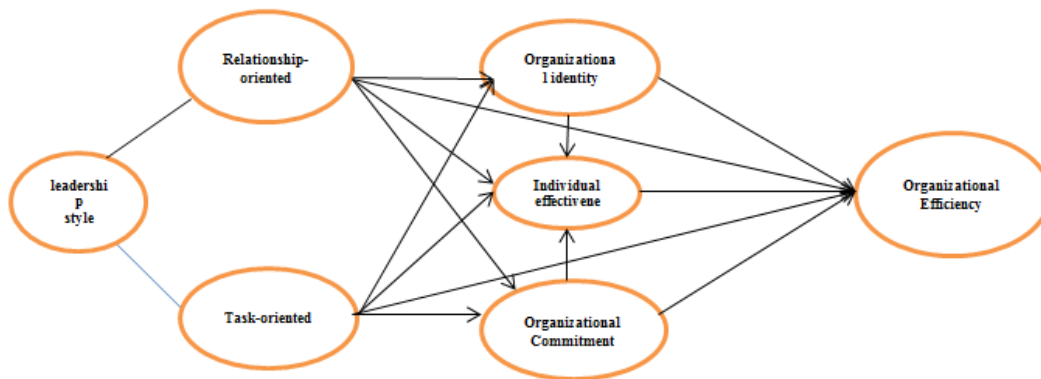


Fig. 1. Conceptual model of research

3.2. Type of Research

Due to its nature, this research is a practical type because its purpose is to develop knowledge and awareness in the field of ethics and the audit profession's culture. It is also a descriptive-survey method. The research's theoretical framework and background are done by inductive analogy and data collection and the final result to test the rejection or acceptance of hypotheses through a questionnaire. Because this research is conducted in a real environment, i.e., public and private sector audit firms, it is considered field research. Library resources were used to formulate theoretical foundations, definitions, and concepts. In this study, to measure the dependent

variable of efficiency, the standard questionnaire of organizational efficiency was designed by Ahmadi Harisi Farahmand (2015) with the modeling Hersey and Goldsmith (1980) questionnaire, was used. This questionnaire has nine questions in one dimension. Suppose the scores of the questionnaire are between 9 and 27. In that case, the rate of efficiency is poor. The scores between 27 and 40 have the rate of mean efficiency. If the scores are above 40, the level of organizational efficiency of audit firms is very good. The relationship-oriented and task-oriented leadership questionnaire of Bardens and Metzkas (1969) was used to measure leadership style and have 35 questions. Sherer et al.'s (1982) and Garry et al.'s

(2002) questionnaires were also used to measure individual effectiveness. A total of 30 Likert-scale questions with five options from (strongly disagree= 1) to (strongly agree= 5) were considered to measure the individual effectiveness variable; so that the choice of strongly disagree, indicates the lowest level of effectiveness and strongly agree, indicates the highest level of effectiveness. Allen and Meyer's (1990) model was used to measure the mediating variable of organizational commitment. This questionnaire consists of 24 questions, questions 1 to 8 are related to measuring emotional commitment, questions 9 to 16 are designed to measure continued commitment, and questions 17 to 24 are designed to measure normative commitment. Scores are based on a 5-point Likert scale (strongly agree= 5, agree= 4, neither agree nor disagree= 3, disagree= 2, and strongly disagree= 1) for each question. Therefore, the closer your score is to the maximum score (minimum= 8 and maximum= 40) in each organizational commitment dimension, it shows that dimension is stronger in your organization. Mael & Ashforth (1992) questionnaire was used to measure the mediating variable of organizational identity. This questionnaire consists of six choice questions that are graded based on the Likert scale. The number 1 indicates the lowest degree of organizational identity, and number 6 indicates the organization's highest degree of identity. To analyze this study's data, the method of structural equations using SPSS and 3PLS software has been used. First, the validity and reliability of the questions were tested using confirmatory factor analysis, and then the research hypotheses were tested using structural equation analysis.

4. Research Variables

The independent variables of research are relationship-oriented and task-oriented leadership style, and the dependent variable is organizational efficiency. The variables of organizational identity, individual effectiveness, and organizational commitment are also mediating variables of the research. Also, variables of gender, age, job rank, place of employment, level of education, and work experience were selected as demographic variables.

5. Research Hypotheses

The research hypotheses based on the theoretical foundations and the purpose of the research are as follows:

- 1) Relationship-oriented leadership style improves the organizational identity of private sector audit firms.
- 2) Relationship-oriented leadership style improves the individual effectiveness of auditors working in private sector audit firms.
- 3) Relationship-oriented leadership style improves the organizational commitment of private sector audit firms.
- 4) Relationship-oriented leadership style improves the organizational efficiency of private sector audit firms.
- 5) A task-oriented leadership style improves the organizational identity of private sector audit firms.
- 6) Task-oriented leadership style improves the individual effectiveness of auditors working in private sector audit firms.
- 7) Task-oriented leadership style improves the organizational commitment of private sector audit firms.
- 8) A task-oriented leadership style improves the organizational efficiency of private sector audit firms.
- 9) Organizational identity improves the individual effectiveness of auditors working in private sector audit firms.
- 10) Organizational identity improves the organizational efficiency of private sector audit firms.
- 11) Organizational commitment improves the individual effectiveness of auditors working in private sector audit firms.
- 12) Organizational commitment improves the organizational efficiency of private sector audit firms.
- 13) The individual effectiveness of auditors improves the organizational efficiency of private sector audit firms.
- 14) Relationship-oriented leadership style improves the organizational identity of public sector audit firms.
- 15) Relationship-oriented leadership style improves the individual effectiveness of auditors working in public sector audit firms.

- 16) Relationship-oriented leadership style improves the organizational commitment of public sector audit firms.
- 17) Relationship-oriented leadership style improves the organizational efficiency of public sector audit firms.
- 18) A task-oriented leadership style improves the organizational identity of public sector audit firms.
- 19) Task-oriented leadership style improves the individual effectiveness of auditors working in public sector audit firms.
- 20) A task-oriented leadership style improves the organizational commitment of public sector audit firms.
- 21) A task-oriented leadership style improves the organizational efficiency of public sector audit firms.
- 22) Organizational identity improves the individual effectiveness of auditors working in public sector audit firms.
- 23) Organizational identity improves the organizational efficiency of public sector audit firms.
- 24) Organizational commitment improves the individual effectiveness of auditors working in public sector audit firms.
- 25) Organizational commitment improves the organizational efficiency of public sector audit firms.
- 26) The individual effectiveness of auditors improves the organizational efficiency of public sector audit firms.

6. Results

6.1. Descriptive Statistics

In this section, before testing the hypotheses, descriptive statistics are summarized. Of the total statistical sample of 300 people, 176 are employed in the private sector and 124 in the public sector. Auditors with an associate degree and less, B.Sc., M.Sc., and Ph.D. degrees were 3.3%, 45%, 42.3%, and 9.3%, respectively. The number of women and in this study was 114 and 186, respectively. Also, the private sector's mean work experience is close to 7.2 years, and the public sector is 13.55 years. The mean leadership style in the public sector is 3.34 and in the

private sector is 3.17. The private sector statistical sample's minimum and maximum age is 19 years and 65 years, respectively, and in the public sector is 22 years and 65 years, respectively.

6.2. The Measurement Models Fit

In the inferential analysis, before testing the hypotheses, the fit of the measurement models should be measured first. To examine the fit of the first part, i.e., the fit of measurement models, the following three items are used: index reliability, convergent validity, and divergent validity.

In order to test the reliability of the index, three criteria are tested: 1) factor loading, 2) Cronbach's alpha, and 3) composite reliability (CR). Factor loading is calculated by calculating the correlation value of the indices of a construct with that construct. Suppose this value is equal to or greater than the value of 0.4. In that case, it confirms that the variance between the construct and its indices is greater than the variance of the measurement error of that construct, and the reliability of that measurement is acceptable (Holland, 1999). Cronbach's alpha is a classic criterion for measuring reliability and a measure of internal stability (internal consistency). A Cronbach's alpha value above 0.7 indicates acceptable reliability. CR is another criterion for evaluating reliability for which the value obtained according to a rule of thumb is greater than 0.7 to ensure the reliability of research variables (Nonali, 1978)

In the initial factor analysis, the questions that did not meet the required conditions were removed, and factor analysis was retested for the remaining questions. The final factor analysis results for the remaining questions of the research variables and the values related to Cronbach's alpha, CR, and convergent validity are shown in Table 1.

As can be seen in the table above, after retesting the factor analysis, the factor loading related to the remaining questions of all research variables was more than 0.4. Also, the CR of all research variables is more than 0.7. Cronbach's alpha of all research variables is higher than 0.7. Therefore, it can be claimed that with a high level of reliability, the research variables have good reliability. Convergent validity (AVE) for all research variables is higher than 0.5, which indicates the convergent validity of research variables.

Table 1. Results of the final factor analysis and fit values of the measurement model

| AVE | | CR | | Cronbach's alpha | | Standard error | Factor loading | Item/dimension | Variable name | | | |
|----------|-----------|----------|-----------|------------------|-----------|----------------|----------------|----------------|--|-------|-------|--------------|
| Variable | Dimension | Variable | Dimension | Variable | Dimension | | | | | | | |
| 0.5672 | - | 0.8446 | - | 0.7547 | - | 0.469 | 0.729 | LD15 | Task-oriented leadership style | | | |
| | | | | | | 0.399 | 0.775 | LD20 | | | | |
| | | | | | | 0.436 | 0.751 | LD4 | | | | |
| | | | | | | 0.392 | 0.78 | LD6 | | | | |
| 0.5939 | - | 0.8534 | - | 0.7713 | - | 0.445 | 0.745 | LR10 | Relationship-oriented leadership style | | | |
| | | | | | | 0.276 | 0.851 | LR15 | | | | |
| | | | | | | 0.398 | 0.776 | LR3 | | | | |
| | | | | | | 0.504 | 0.704 | LR9 | | | | |
| 0.6382 | - | 0.9136 | - | 0.8865 | - | 0.382 | 0.786 | OI1 | Organizational identity | | | |
| | | | | | | 0.346 | 0.809 | OI2 | | | | |
| | | | | | | 0.328 | 0.820 | OI3 | | | | |
| | | | | | | 0.279 | 0.849 | OI4 | | | | |
| | | | | | | 0.421 | 0.761 | OI5 | | | | |
| 0.5460 | - | 0.8933 | - | 0.8616 | - | 0.44 | 0.748 | OP1 | Organizational efficiency | | | |
| | | | | | | 0.296 | 0.839 | OP2 | | | | |
| | | | | | | 0.502 | 0.706 | OP3 | | | | |
| | | | | | | 0.44 | 0.748 | OP5 | | | | |
| | | | | | | 0.434 | 0.752 | OP6 | | | | |
| | | | | | | 0.484 | 0.718 | OP7 | | | | |
| 0.5084 | - | 0.892 | - | 0.8619 | - | 0.412 | 0.767 | PE15 | Individual effectiveness | | | |
| | | | | | | 0.471 | 0.727 | PE17 | | | | |
| | | | | | | 0.482 | 0.720 | PE18 | | | | |
| | | | | | | 0.486 | 0.717 | PE22 | | | | |
| | | | | | | 0.548 | 0.672 | PE23 | | | | |
| | | | | | | 0.546 | 0.674 | PE25 | | | | |
| | | | | | | 0.473 | 0.726 | PE6 | | | | |
| 0.7692 | 0.6224 | 0.9088 | 0.9198 | 0.9235 | 0.8977 | 0.115 | 0.941 | Emotional CC | Organizational commitment | | | |
| | 0.5647 | | 0.8368 | | | | | 0.7417 | | 0.323 | 0.823 | Continued EC |
| | 0.5943 | | 0.8795 | | | | | | | | | 0.8284 |

Divergent validity is acceptable when the square root of the AVE for each construct is greater than the common variance between that construct and other constructs (i.e., the value of correlation coefficients between constructs) in the model. The divergent validity results of the organizational commitment variable dimensions are shown in Table 2, and the divergent validity results of the research variables are shown in Table 3.

In the main diameter of Tables 1 and 2, the square root of the AVE values for each variable is shown. Below the main diameter, the correlation between the organizational commitment variable's dimensions and the research variables is shown. As can be seen, the correlation between each pair of research variables is less than the square root of the AVE, which indicates divergent validity.

Table 2. Results of divergent validity of the dimensions of organizational commitment

| Normative | Continued | Emotional | Variable name |
|-----------|-----------|-----------|---------------|
| | | 0.7889 | Emotional |
| | 0.7515 | 0.6941 | Continued |
| 0.7709 | 0.6036 | 0.6957 | Normative |

Table 3. Validity results of divergence of research variables

| Organizational identity | Task-oriented leadership style | Relationship-oriented leadership style | Organizational commitment | Organizational efficiency | Individual effectiveness | Variable name |
|-------------------------|--------------------------------|--|---------------------------|---------------------------|--------------------------|--|
| | | | | | 0.7130 | Individual effectiveness |
| | | | | 0.7389 | 0.4388 | Organizational efficiency |
| | | | 0.8770 | 0.7240 | 0.4401 | Organizational commitment |
| | | 0.7706 | 0.5536 | 0.4322 | 0.4913 | Relationship-oriented leadership style |
| | 0.7591 | 0.7485 | 0.6048 | 0.3997 | 0.362 | Task-oriented leadership style |
| 0.7989 | 0.5831 | 0.6300 | 0.6407 | 0.4733 | 0.5823 | Organizational identity |

6.3. Structural Models Fit

In the inferential analysis, pre-testing the hypotheses and post-testing the fit of measurement models, the fit of the structural models should be tested in the second step. The following five items are used to examine the fit of structural models: 1) Significance numbers, 2) R2 numbers, 3) Effect size criterion (f^2), 4) Q2 criterion, 5) Redundancy index criterion. Since, in this research, the conceptual model of the research is tested in two models for the private sector and the public sector, the fit of the structural model for each conceptual model is tested separately. However, the results are shown in a table.

The path coefficient shows the effect of the research variables on each other. The T statistic related to each path shows the significance of the relevant effect so that if the value of these numbers (T) exceeds 1.96, it indicates the correctness of the relationship between constructs and thus confirm the hypotheses of the research at 95% confidence level. Effect size criterion (f^2) determines the intensity of the relationship between model constructs. The values of 0.02, 0.15, and 0.35 indicate the size of the small, medium, and large effect of one construct on another. The results of the effect size criterion (f^2) in both public and private sectors are shown in Table 4.

Table 4. The results of the effect size criterion (f^2)

| Private sector | | Public sector | | Path |
|---------------------|-------|---------------------|-------|---|
| Effect size | f^2 | Effect size | f^2 | |
| Relatively moderate | 0.119 | Moderate | 0.179 | Relationship-oriented leadership style -> Organizational identity |
| Small | 0.031 | Small | 0.076 | Relationship-oriented leadership style -> Individual effectiveness |
| Slight | 0.012 | Small | 0.072 | Relationship-oriented leadership style -> Organizational commitment |
| Slight | 0.011 | Small | 0.032 | Relationship-oriented leadership style -> organizational efficiency |
| Small | 0.032 | Small | 0.028 | Task-oriented leadership style -> Organizational identity |
| Small | 0.024 | Small | 0.021 | Task-oriented leadership style -> Individual effectiveness |
| Relatively moderate | 0.107 | Relatively moderate | 0.138 | Task-Oriented leadership style -> Organizational Commitment |
| Small | 0.029 | Small | 0.021 | Task-oriented leadership Style -> Organizational efficiency |
| متوسط | 0.208 | Small | 0.084 | Organizational identity -> Individual |

| Private sector | | Public sector | | Path |
|----------------|-------|---------------|-------|---|
| Effect size | f^2 | Effect size | f^2 | |
| | | | | effectiveness |
| Slight | 0.009 | Slight | 0.005 | Organizational identity -> Organizational efficiency |
| Slight | 0.006 | Slight | 0.01 | Organizational commitment -> Individual effectiveness |
| Large | 0.640 | Large | 0.464 | Organizational commitment -> Organizational efficiency |
| Small | 0.03 | Small | 0.029 | Individual effectiveness -> organizational efficiency |

Criterion Q2 determines the predictive power of the model regarding the endogenous constructs of the model. The intensity of the model's predictive power for endogenous constructs has been determined as three values, including 0.02, 0.15, and 0.35, which indicate the small, medium, and large predictive power of the indices of that constructs respectively. According to Table 5, the predictive power of organizational efficiency, organizational identity, and individual effectiveness in the private and public sectors are large. The predictive power of organizational commitment in the private sector is moderate and in the public sector is large. However, the predictive power of the dimensions of organizational commitment in both the public and private sectors is large enough that in general it can be said that the endogenous constructs of the model, in general, have good predictive power and confirm the proper fit of the structural model once again.

Criterion R2 indicates the effect that exogenous variables have on an endogenous variable. China (1998) introduced three values of 0.19, 0.33, 0.67 as the criterion values for weak, medium, and strong

values of R2. According to Table 5, the value of R2 of efficiency, individual effectiveness, and organizational commitment variables in the private and public sectors is higher than 0.33 and good. Also, the R2 value of the variables of organizational commitment and organizational identity is higher than 0.33 in the public sector and higher than 0.19 in the private sector, which generally confirms the proper fit of the structural model.

The redundancy index is the standard index for measuring the quality of the structural model. According to Table 5, the redundancy index of the organizational efficiency variable, which is the most important endogenous variable of the research model, is equal to 0.270 in the private sector and 0.331 in the public sector, which is a relatively high value. The mean redundancy index, which is obtained from the mean redundancy index of all endogenous variables of the model, is equal to 0.290 in the public sector and equal to 0.381 in the private sector, a good and appropriate amount and confirms the fit of the structural model again.

Table 5. The results of other structural fit indices of the conceptual research model

| Private sector | | | | Public sector | | | | Variable name |
|------------------|-------|--------------|-------|------------------|-------|--------------|-------|---------------------------|
| Redundancy index | R2 | Shared value | Q2 | Redundancy index | R2 | Shared value | Q2 | |
| 0.172 | 0.339 | 0.508 | 0.152 | 0.210 | 0.413 | 0.508 | 0.168 | Individual effectiveness |
| 0.270 | 0.494 | 0.546 | 0.222 | 0.331 | 0.607 | 0.546 | 0.312 | Organizational efficiency |
| 0.150 | 0.252 | 0.594 | 0.090 | 0.324 | 0.545 | 0.594 | 0.272 | Organizational commitment |
| 0.507 | 0.880 | 0.576 | 0.474 | 0.516 | 0.896 | 0.576 | 0.552 | Emotional |
| 0.351 | 0.550 | 0.638 | 0.242 | 0.503 | 0.788 | 0.638 | 0.466 | Continued |
| 0.422 | 0.679 | 0.622 | 0.340 | 0.497 | 0.799 | 0.622 | 0.485 | Normative |
| 0.180 | 0.318 | 0.565 | 0.182 | 0.286 | 0.506 | 0.565 | 0.291 | Organizational identity |

6.4. Overall Fit of the Research Conceptual Model

To fit the general part of the structural equation models, the goodness of fit criterion has been used. This criterion is obtained by square root multiplying the mean of each structure's shared values by the mean values of R squares of the endogenous constructs of the model (R2). Wetzels et al. (2009, p. 187) have introduced three values of 0.01, 0.25, and 0.36 as a weak, medium, and strong values for the goodness of fit. The results of the overall fit of the structural equation models are shown in Table 6. As can be seen, the present study's conceptual model has a strong fit that can be relied on to a large extent.

Table 6. Results of general fit of structural equations of conceptual research models

| GOF | Mean R2 values of construct | Mean shared values of construct | Model |
|-------|-----------------------------|---------------------------------|----------------|
| 0.539 | 0.502 | 0.578 | Private sector |
| 0.613 | 0.650 | 0.587 | Public sector |

6.5. Test Results of Research Hypotheses

After fitting the research's measurement and structural model in both the public and private sectors, the hypothesis test in both private and public sectors is shown in Table 7.

Table 7. Test results of research hypotheses

| Test result | P Values | T-statistic | Standard deviation | Path coefficient | Hypothesis | No. |
|---------------------|----------|-------------|--------------------|------------------|---|-----|
| Can not be rejected | 0.000 | 5.433 | 0.074 | 0.400 | Relationship-oriented leadership style improves the organizational identity of private sector audit firms. | 1 |
| Can not be rejected | 0.028 | 2.210 | 0.097 | 0.215 | Relationship-oriented leadership style improves the individual effectiveness of auditors working in private sector audit firms. | 2 |
| Rejected | 0.154 | 1.428 | 0.094 | 0.135 | Relationship-oriented leadership style improves the organizational commitment of private sector audit firms. | 3 |
| Rejected | 0.174 | 1.362 | 0.083 | 0.113 | Relationship-oriented leadership style improves the organizational efficiency of private sector audit firms. | 4 |
| Can not be rejected | 0.006 | 2.774 | 0.074 | 0.206 | A task-oriented leadership style improves the organizational identity of private sector audit firms. | 5 |
| Rejected | 0.057 | 1.909 | 0.098 | -0.188 | Task-oriented leadership style improves the individual effectiveness of auditors working in private sector audit firms. | 6 |
| Can not be rejected | 0.000 | 4.335 | 0.092 | 0.398 | Task-oriented leadership style improves the organizational commitment of private sector audit firms. | 7 |
| Can not be rejected | 0.036 | 2.107 | 0.086 | -0.181 | A task-oriented leadership style improves the organizational efficiency of private sector audit firms. | 8 |
| Can not be rejected | 0.000 | 5.613 | 0.087 | 0.489 | Organizational identity improves the individual effectiveness of auditors working in private sector audit firms. | 9 |
| Rejected | 0.325 | 0.985 | 0.098 | -0.097 | Organizational identity improves the organizational efficiency of private sector audit firms. | 10 |
| Rejected | 0.309 | 10.19 | 0.081 | 0.082 | Organizational commitment improves the individual effectiveness of auditors working in private sector audit firms. | 11 |
| Can not be rejected | 0.000 | 9.841 | 0.073 | 0.720 | Organizational commitment improves the organizational efficiency of private sector audit firms. | 12 |
| Can not be rejected | 0.043 | 2.030 | 0.075 | 0.151 | The individual effectiveness of auditors improves the organizational efficiency of private sector audit firms. | 13 |

| Test result | P Values | T-statistic | Standard deviation | Path coefficient | Hypothesis | No. |
|---------------------|----------|-------------|--------------------|------------------|--|-----|
| Can not be rejected | 0.000 | 4.434 | 0.119 | 0.529 | Relationship-oriented leadership style improves the organizational identity of public sector audit firms. | 14 |
| Can not be rejected | 0.009 | 2.614 | 0.157 | 0.41 | Relationship-oriented leadership style improves the individual effectiveness of auditors working in public sector audit firms. | 15 |
| Can not be rejected | 0.014 | 2.469 | 0.131 | 0.324 | Relationship-oriented leadership style improves the organizational commitment of public sector audit firms. | 16 |
| Can not be rejected | 0.024 | 2.265 | 0.100 | 0.227 | Relationship-oriented leadership style improves the organizational efficiency of public sector audit firms. | 17 |
| Rejected | 0.090 | 1.699 | 0.122 | 0.208 | A task-oriented leadership style improves the organizational identity of public sector audit firms. | 18 |
| Rejected | 0.246 | 1.161 | 0.181 | -0.210 | Task-oriented leadership style improves the individual effectiveness of auditors working in public sector audit firms. | 19 |
| Can not be rejected | 0.001 | 3.348 | 0.134 | 0.447 | A task-oriented leadership style improves the organizational commitment of public sector audit firms. | 20 |
| Rejected | 0.054 | 1.93 | 0.09 | -0.174 | A task-oriented leadership style improves the organizational efficiency of public sector audit firms. | 21 |
| Can not be rejected | 0.002 | 3.167 | 0.111 | 0.351 | Organizational identity improves the individual effectiveness of auditors working in public sector audit firms. | 22 |
| Rejected | 0.551 | 0.597 | 0.127 | -0.076 | Organizational identity improves the organizational efficiency of public sector audit firms. | 23 |
| Rejected | 0.347 | 0.942 | 0.134 | 0.126 | Organizational commitment improves the individual effectiveness of auditors working in public sector audit firms. | 24 |
| Can not be rejected | 0.000 | 5.747 | 0.123 | 0.707 | Organizational commitment improves the organizational efficiency of public sector audit firms. | 25 |
| Rejected | 0.103 | 1.633 | 0.086 | 0.140 | The individual effectiveness of auditors improves the organizational efficiency of public sector audit firms. | 26 |

The analysis of research model hypotheses in private sector audit firms includes hypotheses 1 to 13 as follows:

Hypothesis 1: Relationship-oriented leadership style has a positive effect of 40% (0.40) on organizational identity, in other words, with each change in the relationship-oriented leadership style variable, organizational identity variable changes 0.4 units and its direction. This relatively average effect ($f^2 = 0.119$) is statistically significant because the t-statistic related to this effect is equal to 5.433 and greater than 1.96. Therefore, the first hypothesis, that is, the effect of relationship-oriented leadership style on the organizational identity of private sector auditors

can not be rejected. Therefore, it can be inferred that there is a positive and significant relationship between relationship-oriented leadership style and organizational identity in private sector audit firms. As a result, the use of relationship-oriented leadership style by the managers and auditors of these firms, improves and enhances the organizational identity in private sector audit firms.

Hypothesis 2: Relationship-oriented leadership style has a positive effect of 22% (0.215) on individual effectiveness, in other words, with each change in the relationship-oriented leadership style variable, individual effectiveness variable changes 0.22 units and its direction. This small effect ($f^2 = 0.031$) is

statistically significant because the t-statistic related to this effect is equal to 2.210 and greater than 1.96. Therefore, the second hypothesis, ie the effect of relationship-oriented leadership style on the individual effectiveness of private sector auditors, can not be ruled out. Therefore, it can be inferred that there is a positive and significant relationship between relationship-oriented leadership style and individual effectiveness in private sector audit firms. As a result of the use of relationship-oriented leadership style by the managers and auditors of these, it will improve individual effectiveness among auditors working in private sector audit firms.

Hypothesis 3: Relationship-oriented leadership style has a positive effect of 14% (0.135) on organizational commitment, in other words, with each change in the relationship-oriented leadership style variable, the organizational commitment variable changes 0.14 units and in the same direction. However, this small effect ($f_2 = 0.012$) is not statistically significant because the t-statistic related to this effect is equal to 1.428 and less than 1.96. Therefore, the third hypothesis, namely the effect of relationship-oriented leadership style on the organizational commitment of private sector auditors, is rejected. Therefore, it can be inferred that there is no positive and significant relationship between relationship-oriented leadership style and organizational commitment in private sector audit firms. As a result, the use of relationship-oriented leadership style by the managers and auditors of these firms does not improve and enhance organizational commitment in private sector audit firms.

Hypothesis 4: Relationship-oriented leadership style has a positive effect of 11% (0.113) on organizational Efficiency, in other words, with each unit change in the relationship-oriented leadership style variable, organizational efficiency variable changes 0.11 units and in the same direction. . However, this insignificant effect ($f_2 = 0.011$) is not statistically significant because the t-statistic related to this effect is equal to 1.362 and less than 1.96. Therefore, the fourth hypothesis, namely the effect of relationship-oriented leadership style on the organizational efficiency of private sector auditors, is rejected. Therefore, it can be inferred that there is no positive and significant relationship between relationship-oriented leadership style and organizational efficiency in private sector audit firms.

As a result, the use of relationship-oriented leadership style by the managers and auditors of these firms does not improve and enhance organizational efficiency in private sector audit firms.

Hypothesis 5: Task-oriented leadership style has a positive effect of 21% (0.206) on organizational identity, in other words, with each change in the task-oriented leadership style variable, organizational identity variable changes 0.21 units and its direction. This small effect ($f_2 = 0.032$) is statistically significant because the t-statistic related to this effect is equal to 2.774 and greater than 1.96. Therefore, the fifth hypothesis, that is, the effect of task-oriented leadership style on the organizational identity of private sector auditors can not be ruled out. Therefore, it can be inferred that there is a positive and significant relationship between task-oriented leadership style and organizational identity in private sector audit firms. As a result of using the managers and auditors of these firms of the duty-oriented leadership style, it improves and promotes organizational identity in private sector audit firms.

Hypothesis 6: Task-oriented leadership style has a negative effect of 19% (-0.188) on individual effectiveness, in other words, with each change in the relationship-oriented leadership style variable, the individual effectiveness variable changes 0.19 units and vice versa. But this small effect ($f_2 = 0.024$) is not statistically significant because the t-statistic related to this effect is equal to 1.909 and less than 1.96. Therefore, the sixth hypothesis, ie the effect of task-oriented leadership style on the individual effectiveness of private sector auditors, is rejected. Therefore, it can be inferred that there is no significant relationship between task-oriented leadership style and individual effectiveness in private sector audit firms. As a result, the use of duty-oriented leadership style by the managers and auditors of these firms will not improve individual effectiveness among auditors working in private audit firms.

Hypothesis 7: Task-oriented leadership style has a positive effect of 40% (0.398) on organizational commitment, in other words, with each unit change in the task-oriented leadership style variable, the organizational commitment variable changes 0.40 units and in the same direction. This relatively moderate effect ($f_2 = 0.107$) is statistically significant because the t-statistic related to this effect is 4.335 and greater than 1.96. Therefore, the seventh hypothesis,

that is, the effect of task-oriented leadership style on the organizational commitment of private sector auditors can not be ruled out. Therefore, it can be inferred that there is a positive and significant relationship between task-oriented leadership style and organizational commitment in private sector audit firms. As a result, the use of the duty-oriented leadership style by the managers and auditors of these firms improves and enhances organizational commitment in private sector audit firms.

Hypothesis 8: Task-oriented leadership style has a negative effect of 18% (-0.181) on organizational efficiency, in other words, with each change in the task-oriented leadership style variable, the organizational efficiency variable changes 0.18 units and vice versa. Slowly This small effect ($f2 = 0.029$) is statistically significant because the t-statistic related to this effect is equal to 2.107 and greater than 1.96. Therefore, the eighth hypothesis, ie the effect of task-oriented leadership style on the organizational efficiency of private sector auditors can not be ruled out. Therefore, it can be inferred that there is a negative and significant relationship between task-oriented leadership style and efficiency in private sector audit firms. As a result, the use of duty-oriented leadership style by the managers and auditors of these firms improves and enhances efficiency in private sector audit firms.

Hypothesis 9: Organizational identity has a positive effect of 49% (0.489) on individual effectiveness, in other words, with each change in the organizational identity variable, the individual effectiveness variable changes 0.49 units and its direction. This mean effect ($f2 = 0.208$) is statistically significant because the t-statistic related to this effect is equal to 5.613 and greater than 1.96. Therefore, the ninth hypothesis, ie the effect of organizational identity on the individual effectiveness of private sector auditors, can not be ruled out. Therefore, it can be inferred that there is a positive and significant relationship between organizational identity and individual effectiveness in private sector audit firms. Therefore, increasing organizational identity leads to increasing the individual effectiveness of auditors working in private sector audit firms.

Hypothesis 10: Organizational identity has a negative effect of 10% (-0.097) on organizational efficiency, in other words, with each change in the organizational identity variable, the organizational

efficiency variable changes by 0.10 units and vice versa. But this insignificant effect ($f2 = 0.009$) is not statistically significant because the t-statistic related to this effect is 0.985 and less than 1.96. Therefore, the tenth hypothesis that the effect of organizational identity on the organizational efficiency of private sector auditors is rejected. Therefore, it can be inferred that there is no significant relationship between organizational identity and efficiency in private sector audit firms. Therefore, increasing the organizational identity variable alone does not lead to increasing efficiency in private sector audit firms.

Hypothesis 11: Organizational commitment has a positive effect of 8% (0.082) on individual effectiveness, in other words, with each change in the organizational commitment variable, the individual effectiveness variable changes 0.08 units and its direction. But this insignificant effect ($f2 = 0.006$) is not statistically significant because the t-statistic related to this effect is equal to 1.019 and less than 1.96. Therefore, the eleventh hypothesis, ie the effect of organizational commitment on the individual effectiveness of private sector auditors, is rejected. Therefore, it can be inferred that there is no positive and significant relationship between organizational commitment and individual effectiveness in private sector audit firms. Therefore, only increasing the variable of organizational commitment does not lead to increasing efficiency in private sector audit firms.

Hypothesis 12: Organizational commitment has a positive effect of 72% (0.720) on organizational efficiency, in other words, with each unit change in the organizational commitment variable, the organizational efficiency variable changes 0.72 units and in the same direction. This large effect ($f2 = 0.640$) is not statistically significant because the t-statistic related to this effect is 9.841 and greater than 1.96. Therefore, the twelfth hypothesis, that is, the effect of organizational commitment on the organizational efficiency of private sector auditors can not be rejected. Therefore, it can be inferred that there is a positive and significant relationship between organizational efficiency and organizational commitment in private sector audit firms. Therefore, increasing organizational commitment leads to increased efficiency in private sector audit firms.

Hypothesis 13: Individual effectiveness has a positive effect of 15% (0.151) on organizational efficiency, in other words, with each change in the

individual effectiveness variable, the organizational efficiency variable changes 0.15 units and its direction. This small effect ($f^2 = 0.030$) is statistically significant because the t-statistic related to this effect is equal to 2.030 and greater than 1.96. Therefore, the thirteenth hypothesis, ie the effect of individual effectiveness on the organizational efficiency of private sector auditors, can not be rejected. Therefore, it can be inferred that there is a positive and significant relationship between organizational efficiency and individual effectiveness in private sector audit firms. Therefore, increasing the individual effectiveness of auditors leads to increased efficiency in private sector audit firms.

The analysis of research model hypotheses in public sector audit firms includes hypotheses 14 to 26 as follows:

Hypothesis 14: Relationship-oriented leadership style has a positive effect of 53% (0.529) on organizational identity, in other words, with each change in the relationship-oriented leadership style variable, the organizational identity variable changes 0.53 units and its direction. This mean effect ($f^2 = 0.179$) is statistically significant because the t-statistic related to this effect is equal to 4.434 and greater than 1.96. Therefore, the fourteenth hypothesis, ie the effect of relationship-oriented leadership style on the organizational identity of public sector auditors can not be rejected. Therefore, it can be inferred that there is a positive and significant relationship between relationship-oriented leadership style and organizational identity in public sector audit firms. As a result of the use of relationship-oriented leadership style by the managers and auditors of these firms, it improves and enhances the organizational identity in the audit organization.

Hypothesis 15: The relationship-oriented leadership style has a positive effect of 41% (0.410) on individual effectiveness, in other words, with each change in the relationship-oriented leadership style variable, the individual effectiveness variable changes 0.41 units and its direction. This small effect ($f^2 = 0.076$) is statistically significant because the t-statistic related to this effect is equal to 2.614 and greater than 1.96. Therefore, the fifteenth hypothesis, ie the effect of relationship-oriented leadership style on the individual effectiveness of public sector auditors, can not be rejected. Therefore, it can be inferred that there is a positive and significant relationship between relationship-oriented leadership style and individual

effectiveness in public sector audit firms. As a result of the use of relationship-oriented leadership style by the managers and auditors of these firms, it will improve the individual effectiveness among the auditors working in the audit organization.

Hypothesis 16: The relationship-oriented leadership style has a positive effect of 32% (0.324) on organizational commitment, in other words, with each change in the relationship-oriented leadership style variable, the organizational commitment variable changes 0.32 units and its direction. This small effect ($f^2 = 0.072$) is statistically significant because the t-statistic related to this effect is equal to 2.469 and greater than 1.96. Therefore, the sixteenth hypothesis, ie the effect of relationship-oriented leadership style on the organizational commitment of public sector auditors, can not be ruled out. Therefore, it can be inferred that there is a positive and significant relationship between relationship-oriented leadership style and organizational commitment in public sector audit firms. As a result, the use of relationship-oriented leadership style by the managers and auditors of these firms improves and enhances the organizational commitment in the audit organization.

Hypothesis 17: Relationship-oriented leadership style has a positive effect of 23% (0.227) on organizational efficiency, in other words, with each unit change in the relationship-oriented leadership style variable, organizational efficiency variable changes 0.23 units and its direction changes. Slowly This small effect ($f^2 = 0.032$) is statistically significant because the t-statistic related to this effect is equal to 2.265 and greater than 1.96. Therefore, the seventeenth hypothesis, ie the effect of relationship-oriented leadership style on the organizational efficiency of public sector auditors, can not be ruled out. Therefore, it can be inferred that there is a positive and significant relationship between relationship-oriented leadership style and organizational efficiency in public sector audit firms. As a result of the use of relationship-oriented leadership style by the managers and auditors of these firms, it improves and enhances the organizational efficiency in the audit organization.

Hypothesis 18: Task-oriented leadership style has a positive effect of 21% (0.208) on organizational identity, in other words, with each unit change in the task-oriented leadership style variable, the organizational identity variable changes 0.21 units and its direction. But this small effect ($f^2 = 0.028$) is not

statistically significant because the t-statistic related to this effect is equal to 1.699 and greater than 1.96. Therefore, the eighteenth hypothesis, ie the effect of task-oriented leadership style on the organizational identity of public sector auditors, is rejected. Therefore, it can be inferred that there is no positive and significant relationship between task-oriented leadership style and organizational identity in public sector audit firms. As a result, the use of task-oriented leadership style by the managers and auditors of these firms does not improve and enhance the organizational identity in the audit organization.

Hypothesis 19: task-oriented leadership style has a negative effect of 21% (-0.210) on individual effectiveness, that is, with each change in the relationship-oriented leadership style variable, the individual effectiveness variable changes 0.21 units and vice versa. . But this small effect ($f_2 = 0.021$) is not statistically significant because the t-statistic related to this effect is equal to 1.161 and less than 1.96. Therefore, the nineteenth hypothesis, ie the effect of task-oriented leadership style on the individual effectiveness of public sector auditors, is rejected. Therefore, it can be inferred that there is no significant relationship between task-oriented leadership style and individual effectiveness in public sector audit firms. As a result, the use of duty-oriented leadership style by the managers and auditors of these firms will not improve individual effectiveness among the auditors working in the audit organization.

Hypothesis 20: task-oriented leadership style has a positive effect of 45% (0.447) on organizational commitment, in other words, with each unit change in the task-oriented leadership style variable, the organizational commitment variable changes 0.45 units and its direction. This relatively moderate effect ($f_2 = 0.138$) is statistically significant because the t-statistic related to this effect is equal to 3.348 and greater than 1.96. Therefore, the twentieth hypothesis that the effect of task-oriented leadership style on the organizational commitment of public sector auditors can not be rejected. Therefore, it can be inferred that there is a positive and significant relationship between task-oriented leadership style and organizational commitment in public sector audit firms. As a result of using the managers and auditors of these firms of the duty-oriented leadership style, it improves and promotes organizational commitment in the audit organization.

Hypothesis 21: Task-oriented leadership style has a negative effect of 17% (-0.174) on organizational efficiency, in other words, with each unit change in the task-oriented leadership style variable, organizational efficiency variable 0.18 units and vice versa It changes. But this small effect ($f_2 = 0.021$) is statistically significant because the t-statistic related to this effect is equal to 1.930 and less than 1.96. Therefore, the twenty-first hypothesis, ie the effect of task-oriented leadership style on the organizational efficiency of public sector auditors, is rejected. Therefore, it can be inferred that there is no significant relationship between task-oriented leadership style and efficiency in public sector audit firms. As a result, the use of duty-oriented leadership style by the managers and auditors of these firms does not improve and enhance efficiency in the audit organization.

Hypothesis 22: Organizational identity has a positive effect of 35% (0.351) on individual effectiveness, in other words, with each change in the organizational identity variable, the individual effectiveness variable changes 0.35 units and its direction. This small effect ($f_2 = 0.084$) is statistically significant because the t-statistic related to this effect is equal to 3.167 and greater than 1.96. Therefore, the twenty-second hypothesis, that is, the effect of organizational identity on the individual effectiveness of public sector auditors can not be rejected. Therefore, it can be inferred that there is a positive and significant relationship between organizational identity and individual effectiveness in public sector audit firms. Tauditherefore, increasing organizational identity leads to increasing the individual effectiveness of auditors working in public sector audit firms.

Hypothesis 23: Organizational identity has a negative effect of 8% (-0.076) on organizational efficiency, in other words, with each change in the organizational identity variable, the organizational efficiency variable changes by 0.8 units and vice versa. . But this insignificant effect ($f_2 = 0.005$) is not statistically significant because the t-statistic related to this effect is equal to 0.597 and less than 1.96. Therefore, the twenty-third hypothesis, ie the effect of organizational identity on the organizational efficiency of public sector auditors, is rejected. Therefore, it can be inferred that there is no significant relationship between organizational identity and efficiency in public sector audit firms. Therefore, increasing the

organizational identity variable alone does not lead to increasing efficiency in public sector audit firms.

Hypothesis 24: organizational commitment has a positive effect of 13% (0.126) on individual effectiveness, in other words, with each change in the organizational commitment variable, the individual effectiveness variable changes 0.13 units and in the same direction. But this insignificant effect ($f_2 = 0.001$) is not statistically significant because the t-statistic related to this effect is equal to 0.942 and less than 1.96. Therefore, the twenty-fourth hypothesis, ie the effect of organizational commitment on the individual effectiveness of public sector auditors, is rejected. Therefore, it can be inferred that there is no positive and significant relationship between organizational commitment and individual effectiveness in public sector audit firms. Therefore, increasing the organizational commitment variable alone does not lead to increasing efficiency in public sector audit firms.

Hypothesis 25: organizational commitment has a positive effect of 71% (0.707) on organizational efficiency, in other words, with each change in the organizational commitment variable, the organizational efficiency variable changes 0.71 units and in the same direction. This large effect ($f_2 = 0.464$) is not statistically significant because the t-statistic related to this effect is equal to 5.747 and greater than 1.96. Therefore, the twenty-fifth hypothesis, ie the impact of organizational commitment on the organizational efficiency of public sector auditors, can not be rejected. Therefore, it can be inferred that there is a positive and significant relationship between organizational efficiency and organizational commitment in public sector audit firms. Therefore, increasing organizational commitment leads to increased efficiency in public sector audit firms.

Hypothesis 26: Individual effectiveness has a positive effect of 14% (0.40) on organizational efficiency, in other words, with each change in the individual effectiveness variable, the organizational efficiency variable changes by 0.14 units and its direction. But this small effect ($f_2 = 0.029$) is not statistically significant because the t-statistic related to this effect is equal to 1.633 and less than 1.96. Therefore, the twenty-sixth hypothesis, ie the effect of individual effectiveness on the organizational efficiency of public sector auditors, is rejected.

Therefore, it can be inferred that there is no positive and significant relationship between organizational efficiency and individual effectiveness in public sector audit firms. Therefore, only increasing the individual effectiveness of auditors does not lead to increasing efficiency in public sector audit firms.

According to the results of Table 7 in the private and public sector, at a 95% confidence level, it can be concluded that:

Among the 13 hypotheses related to private sector audit firms, the first, second, fifth, seventh, eighth, ninth, twelfth, and thirteenth hypotheses cannot be rejected. The third, fourth, sixth, tenth, and eleventh hypotheses are rejected. Also, among the other 13 hypotheses related to public sector audit firms, the fourteenth, fifteenth, sixteenth, seventeenth, twentieth, twenty-second, twenty-fifth, and twenty-sixth hypotheses cannot be ruled out, and the eighteenth, nineteenth, twenty, twenty-third, twenty-third, and twenty-fourth hypotheses are rejected.

7. Conclusions, Suggestions, and Limitations

This article examined audit firms' organizational efficiency evaluation based on leadership style in both the public and private sectors. According to the results obtained in the studies of both private and public sectors, it can be inferred that in both public and private sectors, applying a relationship-oriented leadership style leads to the improvement and promotion of identity in that organization. Also, a significant relationship between task-oriented leadership style and organizational identity in the private sector is confirmed but rejected in the public sector. In general, according to the results and numbers obtained, it can be concluded that the relationship-oriented leadership style has more effective than the task-oriented leadership style on improving identity in the private sector.

In both the public and private sectors, applying a relationship-oriented leadership style leads to an increase in the individual effectiveness of the auditors working in that organization. Also, the existence of a negative and significant relationship between task-oriented leadership style and individual effectiveness in private and public sectors is rejected, which confirms the direct and effective relationship between the manager and appropriate employee and the

effectiveness of tasks by employees in organizations, both public and private. Applying a task-oriented leadership style leads to promoting and improving organizational commitment in audit firms, both public and private. Also, a significant relationship between relationship-oriented leadership style and organizational commitment in the public sector is confirmed but rejected in the private sector. In general, it can be concluded that a relationship-oriented and task-oriented leadership style has a greater effect on improving and enhancing organizational commitment in the public sector than in the private sector. The existence of two styles of task-oriented and relationship-oriented leadership in an organization is known as the middle or integrated leadership style, which is, in some ways, authoritarian and, in some ways, liberal. Therefore, it can be inferred that in the audit firm, an integrated leadership style leads to the improvement and promotion of commitment in the organization. In contrast, the use of a task-oriented leadership style in the private sector also improves organizational commitment.

The results obtained from the main variables of the research, i.e., the independent variables of relationship-oriented and task-oriented leadership style and the dependent variable of organizational efficiency in public and private sector audit firms, show that the existence of a significant relationship between relationship-oriented leadership style and organizational efficiency in the public sector is accepted with an acceptable significance number but rejected in audit firms of the private sector. In contrast, the existence of a significant and negative relationship between task-oriented leadership style and organizational efficiency in the private sector with an acceptable number is confirmed but rejected in the public sector. This result indicates that the leadership style used in public sector audit firms is usually authoritarian. Managers who follow this type of leadership style make all the decisions themselves and their employees should obey his decisions without question or comment. In contrast, the leadership style in private sector audit firms is more liberal. Managers use the opinions and suggestions of their employees to increase their organization's performance and efficiency, which leads to creating more cohesion between the members of the organization and the continuous effort of all the pillars of the organization, from the employees to the middle and top managers.

On the other hand, both of the above study groups (audit organization and audit firms of the society of certified public accountants) confirm the existence of a significant and positive relationship between the two variables of organizational identity and individual effectiveness. However, this positive and significant relationship with a more significant number is evident in the private sector, which indicates the higher impressive organizational identity on the individual effectiveness of auditors working in private sector audit firms. Also, in both the private and public sectors, a significant and positive relationship between the two variables of organizational commitment and organizational efficiency is confirmed. However, this positive and significant relationship with a more significant number is evident in the private sector, which indicates the higher impressive organizational commitment to organizational efficiency in private sector audit firms. In both the private and public sectors, the existence of a significant and negative relationship between the two variables of organizational identity and organizational efficiency is rejected. This non-confirmation of the negative relationship with almost similar numbers in public and private sectors indicates the weak and small effect of organizational identity variable on organizational efficiency in audit firms.

On the other hand, a significant and positive relationship between the two variables of organizational commitment and individual effectiveness has not been confirmed in both the public and private sectors. The existence of a positive and significant relationship between the variables of individual effectiveness and organizational efficiency is confirmed in private sector audit firms but is rejected in the public sector. This confirms the existence of an effective relationship between these two variables among the firms of the society of certified public accountants.

In today's competitive world where efficiency has increased in all areas, only organizations that make the best use of their resources, the most important of which is the organization's human resources, can remain competitive. One of the factors of organizational success in achieving goals depends on how management practices and the manager's effective leadership styles. In the role of the leader of the organization, the manager can choose different styles in leading the human resources and the organization.

Appropriate behavioral patterns of the manager in any organization create strong morale and motivation in employees and increase their job satisfaction. As a result, managers can increase their job satisfaction, organizational commitment, and organizational efficiency by using the right leadership style. Therefore, this article's authors tried to investigate the relationship between organizational efficiency and leadership style among employees active in the country's audit profession. According to numerous domestic and foreign researches on efficiency in different organizations by various researchers, organizational efficiency can be considered an important and effective variable to improve organizations' performance, including audit firms. Today, the role of the manager of the organization as a leader is so important that in all fields to find people who have the necessary ability to lead, continuous efforts are made, but still, most organizations, both public and private, face with managerial inflation and lack of leadership for that organization. This article can provide a better understanding of organizational efficiency and leadership style among the country's audit firms in public and private sectors to this article's users, including the audit firm, society of certified public accountants, the Securities and Exchange Organization, and so on.

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