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**Organizational Culture and Leadership Styles Impact on  
Organizational Performance in Jordanian Insurance Sector**

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# Organizational Culture and Leadership Styles Impact on Organizational Performance in Jordanian Insurance Sector

The aim of this dissertation is to obtain a doctoral (PhD) degree in the scientific field of "Management and Business"

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## **LIST OF ABBREVIATION**

CVF = Competing Value Framework  
OKAI = Organizational Culture Assessment Instrument  
DOCS = Denison's Organizational Culture Survey  
HRM = Human Resource Management  
IOV = The Industrial Organization View  
RBV= The Resource-Based View  
GTL = The global transformational leadership scale  
INCO = Involvement – Consistency cultural Trait  
Mis = Mission Culture Trait  
Adp = Adaptability Cultural trait  
TFLS = Transformational Leadership Styles  
TSLs = Transactional Leadership styles  
CRS = Contingent Reward Style  
CPS = Contingent Punishment Style  
TSLs\_CR = Contingent Reward Transactional Leadership Styles  
TSLs\_CP = Contingent Punishment Transactional Leadership Styles  
OJSS = The Overall Job Satisfaction Scale  
Js = The Job Satisfaction  
KUT = The Klein et al. Unidimensional Target-free Scale  
Ocm = Organizational Commitment  
Effs = Organizational Effectiveness  
ItQ = Intention to Quit  
SEM = Structure Equation Modelling  
EFA = Exploratory Factor Analysis  
CFA = Confirmatory Factor Analysis

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## INTRODUCTION

Organizations now face several internal and external difficulties, including intense competition in all economic sectors, changes in the market needs and quality of human resource, and the influence of globalization, and technology revolutions. These and other causes have underlined the significance of companies being flexible, adaptable or changeable in order to continue their operations (RIZESCU and TILEAGA, 2016). These transformational activities have acquired great interest among both academic and applied studies, due to the important role that plays in maximizing organizational outcomes (NAFUKHO et al., 2009; PLAKHOTNIK and ROCCO, 2011). At the heart of these activities, the roles of organizational culture as well as the leadership styles become crucial for an organization's survival, where the culture of an organization considered as a social glue that holds it together, and the leader plays a significant role in expanding and crafting that organizational culture (SCHEIN, 1990; SHARMA and SHARMA, 2010).

As long as an organization's culture is capable of balancing internal integration and external adaptability, it will have a competitive edge over other organizations that lack that balance. (BARNEY, 1986; HITT et al., 2017). Hence, the organization's leaders or managers must realize the essential need to foster an appropriate organizational culture to ensure that the organization is strong enough to achieve its objective and remain competitive. That is why there is a collaborative effort that should be undertaken by all members within the organization at all levels. However, each organization has its own culture that has been developed gradually through interaction among its members and environment to deal with internal and external problems, support organizational goals achievement, and works as a valid formula for solving problems, intellectual thinking, and decisions making (SCHEIN, 1984, 1990).

Managers and leaders of the organization, on the one side, are considered essential keys for establishing and developing the culture of the organization because they have the responsibility of detecting or recognizing both the changes that occur internally and externally which affect the organization immediately, provide recommendations and achieving the suitable reactions to such effects, then adapting the culture of the organization to be fit the new status (HATCH, 1993; MATKÓ and TAKÁCS, 2017; SCHEIN, 1990). On the other side, identifying the role of all organization's members is essential in cultural evolution, since their personal values, beliefs, assumptions, and experiences contribute to the development of organizational culture (SCHEIN, 1990; VAN DEN STEEN, 2010a, 2010b).

The significant effects that organizational culture and leadership style have on organizational performance make them one of the most global concerns (CHILLA et al., 2014; OGBONNA

and HARRIS, 2000; TSAI, 2011; ZEHIR et al., 2011) or such performance indicators as employees job satisfaction and commitment and turnover intention (AL-SADA et al., 2017; ELIYANA et al., 2019; LOK and JOHN, 2004; SILVERTHORNE, 2004). In order to ensure and sustain the success of the organization; previous organizational studies showed that personal commitment and leadership competencies are required from the decision-makers of the organization. Consequently, the company culture and the leadership styles as well as their effects on employees' job satisfaction and commitment are the main factors in maximizing competitiveness, effectiveness, and organizational success in reaction to unforeseen new challenges.

## **1. MAIN TOPIC AND OBJECTIVES**

Organizational culture and leadership styles are acknowledged to have a significant influence on how the employees perceive their organizational duties and objectives. GHINEA and BRATIANU (2012) argued that organizational culture and leadership act as nonlinear integrators that if they employed well, then the maximum effects can be derived. In nonlinear system the expected outputs are assumed to be bigger than the sum of all separated outputs, consequently, this argument might clarify the roles of organizational culture, leadership and many other integrators play in any organization.

The concept of organizational culture has induced the interest of many researchers and consultants on how these shared values, beliefs, and assumptions guide organizations members' behaviors and attitudes towards higher performance (ALVESSON, 1989; LIM, 1995; SCHEIN, 1984, 1990; SMIRCICH, 1983; TEEHANKEE, 1994). Leaders can influence their followers' behaviors and attitudes through the direct formal instructions and orders, and through in direct effect on altering and shaping the organizational culture (SCHEIN, 1990; VAN DEN STEEN, 2010a, 2010b). Employee performance indicators, including employees' organizational commitment and their job satisfaction are also another important factors that ensures the successful fulfillment of the organizational mission.

Organizational commitment determines how strong is the belief in or acceptance of the organization's values and beliefs, the readiness of performing great efforts on behalf of the organization, and the continuous intention to retain the organization membership (MAYER and SCHOORMAN, 1992). Thus, as much as selecting a suitable organizational culture is essential for organizational success, ensuring the necessary level of organizational commitment among the organization's members is extremely important. Job satisfaction is an important measure of determining the emotional felling level that employee's holds toward his or her job (YOUSEF,

2000). Strong empirical signs showed that the high level of job satisfaction is associated with the employee's overall motivation, and it has a significant impact on individual's performance (JUDGE et al., 2001; POOL, 1997). Both factors organizational commitment and job satisfactions are linked to several organizational outcomes such as absenteeism, turnover (FALKENBURG and SCHYNS, 2007), and job performance (FU and DESHPANDE, 2014).

Despite that numerous studies have been conducted to look at the associations of an organization's culture with its performance (CHILLA et al., 2014; O. O. JOSEPH and KIBERA, 2019), and of an organization leadership styles with its performance (BABALOLA, 2016; WANG et al., 2010), few studies have been addressed the combined relations of the three concepts besides the results are not constantly consistent (CUI and HU, 2012; OGBONNA and HARRIS, 2000; TSAI, 2011; ZEHIR et al., 2011). As a result, additional investigation is needed to define the linkages among organizational culture, leadership styles, and organizational performance, as well as how employee performance measures like job satisfaction and organizational commitment might mediate these relations.

With increasing globalization and business challenges, organizational scholars have extended the organizational research field to benefits from cross-cultural studies (DENISON et al., 2003; FEY and DENISON, 2003). Although many scholars earned great knowledge by studying various cross-cultural contexts, this field of research in the Middle East is still inadequate (ABABANEH, 2010; AL-ADAILEH and AL-ATAWI, 2011; ALADWAN et al., 2015). Nevertheless, given that most of the theories and models have been developed in the Western context, its applicability in a different context is yet challenging (ABI-RAAD, 2019; DENISON et al., 2003). Thus, a better understanding of the association between the pre-mentioned variables in nonwestern context – mainly in the Jordanian context – can be beneficial for evaluating the applicability and effectiveness of current theories and helping organizations leaders and decision-makers by providing an external view about their organizations.

### **1.1 Study aims and objectives.**

Based on the prementioned discussion, the main aims of this research are to test the applicability of selected theories and models in a Jordanian context, precisely, the Denison's organizational culture model (DENISON and MISHRA, 1995) and Bass's transactional and transformational leadership theory (BASS, 1990). Secondly, to inspect the association among different types of organizational culture traits and leadership styles, and their impacts on employees' organizational commitment and their job satisfaction, nevertheless, to evaluates the organizational culture and leadership styles impacts on organizational performance. Accordingly, the aims of the study lead to the following specific objectives:

- To evaluate the applicability of Denison's cultural model in non-Western context, precisely in a Jordanian context.
- To plot the organizational culture profile and identify the dominant leadership styles of Jordanian insurance companies.
- To determine the extent to which organizational culture and leadership styles influence the employees' job satisfaction and organizational commitment.
- To determine the extent to which organizational culture and leadership styles influence organizational performance of the Jordanian insurance companies.
- To explore the extent to which employees' job satisfaction and organizational commitment mediate organizational culture and leadership styles relationships with organizational performance of the Jordanian insurance companies.

## **1.2 Contribution to Knowledge**

This study aims to provide significant contributions to the body of knowledge about the organizational management and employee behavior. The first contribution is to explore the applicability of the previous organizational culture model and transactional-transformational leadership styles theory in Jordan. Furthermore, this study contributes to theoretical knowledge by providing empirical evidence about the impact of organizational culture and leadership styles on organizational performance, given that the association among the organizational culture and leadership styles in the Jordanian context is yet unsettled. The choice of Jordanian context for this research is motivated by the scarcity of studies that explore the combined relationships between organizational culture and leadership styles, and their impact on employees' job satisfaction, organizational commitment, and organizational performance.

The choice of Jordan is also important because it is one of the Middle East countries with specific economic, social, religious, values and cultural differences compared to the other parts of the world. Also, this territory is facing continuous political and economic challenges that require a cautious investigation. These differences may cause different implications of relationships among leadership styles, organizational culture, organizational performance, job satisfaction, and organizational commitment, and. The study will also help practitioners in understanding the relationships between organizational culture and leadership styles and their impacts on employees' job satisfaction, organizational commitment, and performance. Clarifying these relationships can help organizations managers to identify the best strategy to improve their employees' attitudes and their organizations effectiveness

## **2. LITERATURE REVIEW**

This chapter provides a thorough review of the existing literature on the related research topic, which includes organizational culture, leadership styles, and organizational performance theories, followed by an in-depth review of prior empirical studies that focus on the relationships between the research variables under examination. This chapter also includes the derived research hypotheses the study attempted to test.

### **2.1 Organizational Culture**

Initially, the term "culture" was used by the Romans era in describing the land tilling and till now the word 'Agriculture' is in use. However, as reported by SCHOENMAKERS (2012), the philosopher Cicero used the word 'culture' in defining philosophy as "culture of the mind" when he formulated the idea of educating someone to be social and political influencer. This idea can be considered as a metaphor meaning in describing the human development process. Gradually, the word 'culture' was attached with and applied in very different ways to cover almost everything by a variety of perceptions in several fields such as anthropology, social science, and psychology (DEPERT et al., 2000; GLASER et al., 1987; SCHEIN, 1990). Thus, the processes of carving and developing the culture concept were affected by many experimental and descriptive perspective of the scholars. In which, each cultural researcher creates explicit or implicit models that suit with its own search criteria. This process was not only biased in defining the basic concept but also the methodology used to study the phenomenon (GLASER et al., 1987; SCHEIN, 1990).

The term "culture" was used to refer to the process of human growth since it encompasses concepts, ways of thinking, and artifacts that can be created, acquired, shared, and learnt by people over time (CREANZA et al., 2017). The human genetic need to embrace new ideas, beliefs and values, practices and experiences of other individuals through the perception and imitation approach fosters the occurrence of cultural transmission and change (HENRICH and HENRICH, 2006). Afterward, the need an obvious method to choose the appropriate culture to be adopted by the organization as a lifestyle.

The organizational culture concept appeared firstly in the anthropology and social science (DEPERT et al., 2000). In spite of the fact that the anthropologists offers many definitions for the organizational culture, most of the them agreed about a common feature that identify the organizational culture such as culture can be learned and shared among group's members, it is demonstrating the variance of thinking and behaving among groups and it is working as mirror of individual social and psychological identity (SCHEIN, 1990). Yet, anthropologists defined

culture as a pattern of shared values, ideas, norms, assumptions and rules of behavior that permit a social group to interact and sustain itself together (HUDELSON, 2004). According to HOFSTEDE (2011) culture is defined as “the collective programming of the mind that distinguishes the members of one group or category of people from others”. J. WALLACE et al. (1999) reported that the organizational culture concept was capable to find its' place in management literature during the 70<sup>th</sup> and 80<sup>th</sup> of last century, when PETERS (1978) emphasized the prominence of the informal dimension that describe any organization referring to that dimension by the organizational culture terms. Followed by the work of PETTIGREW (1979) who concluded that organizational culture is describing the shared meanings that individually and collectively acknowledged to be valid to chaperon a particular group at a particular time, in which it is explaining how groups are thinking, evaluating and acting according to their needs. That period was the primary step to introduce the organizational culture into the organizational psychology studies (DETERT et al., 2000).

The definition of organizational culture concept is challenging, given that many scholars used it in a wide range of social sciences such as anthropology, psychology, and sociology (HOFSTEDE et al., 1990). Hence, the literature offered several definitions that reflect the organizational scholars' viewpoints about the concept, based on their disciplines and scholarly backgrounds, which led them to defined it differently. In a study of some conceptualization of organizational culture and its impact on organizational effectiveness, ALVESSON (1989) noted that the concept was adapted in various ways by observing culture as a fundamental building block in the organizational structure, or as a symbolic result of the organization's leadership or management (BERG, 1986), and by treating culture as a diagnostic tool that clarifies basic assumptions that underlie organizational internal and external interaction (SCHEIN, 1984), or as a paradigmatic notion that offers a deep and rich understanding of all cultural aspects of organizations (SMIRCICH, 1983).

For those who view culture as a sub-unit in an organization's structure that acts as a behavioral regulation force, tend to narrow organizational culture impacts on organizational performance, by assuming that if organization's norms and values are strong enough to influence organizations members behaviors, it can hold the most impact on organizational performance, then organizational culture is considered important. Whereas in a symbolic management view, organizational culture impacts are limited in the management actions and their symbolic role in establishing shared meanings about organizational reality, thus organizations members are observing the managerial actions as valid manifests that should control their performance (ALVESSON, 1989).

A more comprehensive view represented by the diagnostic instrument or functionalist view, where organizational culture is presumed to have extensive impacts on organizational effectiveness, performance and individual satisfaction, in which organizational culture works as a generator for the organizations' members' behaviors and attitudes by reflecting underlying assumptions that are adopted by organizations members (ALVESSON, 1989). Organizational culture therefore has been defined as “the pattern of shared values and beliefs that help individuals understand organizational functioning and thus provide them with the norms for behavior in the organization” (DESHPANDE and WEBSTER, 1989, p. 4).

In the same line, DAFT and LANE (2005, p. 422) defined organizational culture as “the set of key values, assumptions, understandings, and norms that is shared by members of an organization and taught to new members as correct”. However, most of definitions assert that organizational culture consists as set of shared values, beliefs, and assumptions employed by the organizations' members to guide them in their organization. Also, it forms the accepted guideline that governs their behaviors and it determines the level of unity and integration among them (GLASER et al., 1987; HATCH, 1993).

One of the most well-known definition has been offered by SCHEIN (1984, p. 3) who states that organizational culture is “a pattern of basic assumptions, that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid and, therefore is to be taught to new members as the correct way to perceive, think, and feel in relation to those problems”. Hence, Schein’s definition will be adopted in this study as it is offering a clear view about the organization culture evolution in organizations.

GHINEA and BRATIANU (2012, p. 257) looked to organizational culture as “a strong nonlinear integrator of the organizational intellectual capital acting especially on the emotional knowledge field and contributing significantly to the motivation of employees”. Accordingly, in nonlinear systems, the expected output will be bigger than the sum of all individual’s output. It means that any organization need to integrate its individuals’ power to maximize its intellectual capitals, and that directly will be reflected on its performance. This synergy could explain organizational culture and many other integrators’ significant role in any organization.

## **2.2 Measuring Organizational Culture**

Measuring the organizational culture is challenging due to the ambiguous and complex nature of such a concept (GHINEA and BRATIANU, 2012). Indeed, scholars from different fields of science paid great attention to investigate and measure it. They sought to find out what is going on in organizations and how they differ from each other (SCHEIN, 1990). The literature is

prolific in studies that offered models for examining the organizational culture (GLASER et al., 1987; HATCH, 1993; SCHEIN, 1984), as well as, its impacts on the organizational outcomes (CAMERON and QUINN, 2006; DENISON and MISHRA, 1995).

Initially, many scholars have expressed the need for qualitative research, ethnographic observations, and in-depth interviews as a means of studying and analyzing the organizational culture (SCHEIN, 1984, 1990). Later, others have suggested a less time and cost consuming methodology such as quantitative research, based on robust and reliable models (CAMERON and QUINN, 2006; DENISON and MISHRA, 1995; HELFRICH et al., 2007), and the triangular approach (GLASER et al., 1987), which is a combination of several methods that provide strong support to statistical analysis. Much research has suggested a crucial link between organizational culture and organizational performance outcomes such as effectiveness, satisfaction, and commitment (OGBONNA and HARRIS, 2000; SILVERTHORNE, 2004; TSAI, 2011; XENIKOU and SIMOSI, 2006).

One of the well-known models was offered by SCHEIN (1984). Schein's model, as shown in Figure 1, is a conceptual framework that provides a mean for analyzing and studying the organizational culture that any organization might have, by splitting the culture in three levels, namely, Artifacts, Espoused values, and Underlying assumptions. Schein's refers to the stages where a different level of organizational culture is being observed. To better understand and establish a clear overview of any organization's culture, it is necessary to differentiate between three levels of organizational culture (SCHEIN, 1984).



Figure 1. Schein's organizational culture levels  
Source: Adapted from (SCHEIN, 2004)

According to SCHEIN (1984), Artifacts level is reflecting those characteristics of any organizations which includes the tangible and visible aspects such as employees dress code, office layout and structure, technology, product and art exhibited by the organization members. However, this level of organization is difficult to interpret and comprehend, as it gives many observable assumptions about the organization (SCHEIN, 1984). Whereas the espoused values level is about the ideology, standards, and values on which an organization work. The guidance for organization's members is illustrated at this level of culture (SCHEIN, 1984). Finally, the underlying assumptions level is forming the bases and foundation of an organization's culture. Those invisible and intangible aspects which people do not wish to talk about, but it exists and is strong. Underlying assumptions are the essence of interaction within the organizations (SCHEIN, 1984).

The model also introduces the organizational culture evolution timeframe, starts from the start up or early growth phases, where both are affected by the leadership styles or founder attitudes. Then to the mid-life stage, which plays a significant role in defining the organization's identity in which all members contribute to developing subculture that serves the organization internal integration and external adaptation, and ends by maturity phase, where the organization's culture reaches a consistency and validity to accomplish the organization's targeted mission (GHINEA and BRATIANU, 2012; SCHEIN, 1990). In the same direction based on a symbolic-interpretation perspective, HATCH (1993) restructured Schine's model in a more dynamic shape. She added a new component called the symbol to the previous three elements. The cultural dynamics model of HATCH (1993), as shown in Figure 2. explains the transformational processes that occur or recur during culture evolution.

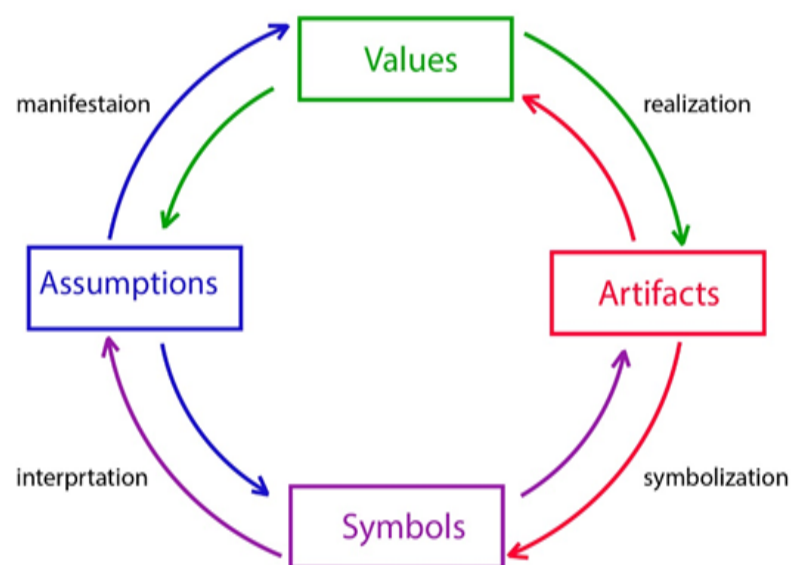


Figure 2. Hatch's Cultural Dynamics Model  
 Source: Adapted from (HATCH, 1993)

HATCH (1993) proposed that four means might explain the transformation within the cultural components, namely, manifestation, realization, symbolization, and interpretation. All processes continually coincide in producing and reforming the organizational culture. For instance, manifestation contributes to the evolution of organizational culture proactively by translating intangible assumptions into observable values, and in a retroactive way to reaffirm or alter existing assumptions. Proactive realization transforms values into reality through creating artifacts that have meaning, while retroactive realization alters or confirms the existing value that presumed to meet the expectations from the produced or adopted artifacts. Likewise, the symbolization process contributes to shaping the organizational culture by combining the lateral and surplus meaning of artifacts and transform them into symbols. Whereas, the interpretation process explains the latent meaning of cultural symbols and unveils its impacts on the basic assumptions either by altering or affirming them.

Indeed, there are many models have been suggested to measure organizational culture and its consequences (CAMERON and QUINN, 2006; DENISON and MISHRA, 1995; HELFRICH et al., 2007). Most of these models were developed based on composites model suggested by QUINN and ROHRBAUGH (1981); (1983) when they were looking for a conceptual framework to integrate organizational "effectiveness" criteria. It is known by the Competing Value Framework (CVF). The CVF as shown in Figure 3, assumes that organizational effectiveness underlies two main dimensions that have a set of competed values.

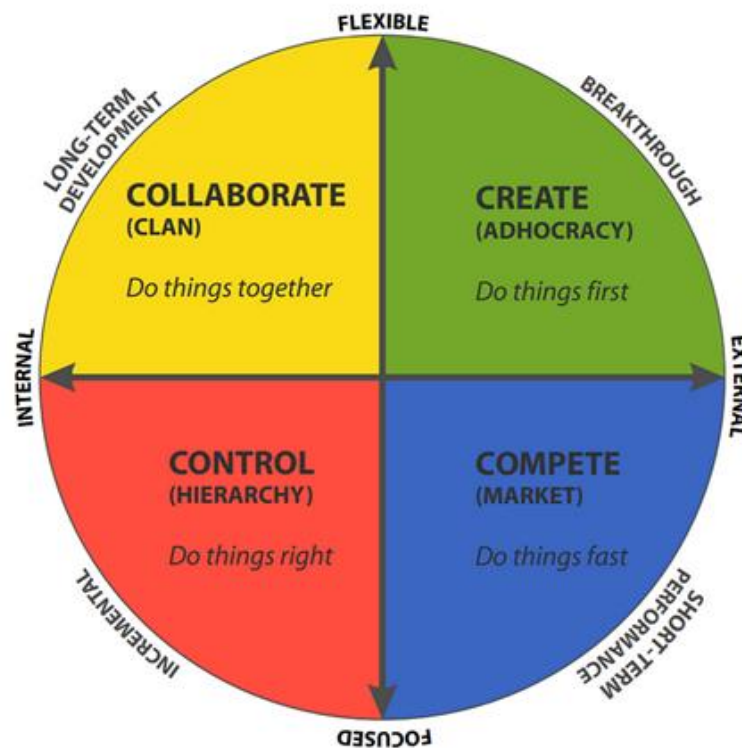


Figure 3. Competing Value Framework  
 Source: Adopted from (CAMERON, 2009)

The first set is regarding the extent to which an organization keeps centralization and control over its processes and activities versus flexibility and decentralization, and the second set is linked to which extent an organization focuses on internal integration versus external adaptation (HELFRICH et al., 2007; QUINN and ROHRBAUGH, 1981, 1983). The CVF reflects a synthesis of organizational theories, which paves the road for studying and understanding a wide range of organizational phenomena, and it has been recognized as one of the most important frameworks in the history of business management (CAMERON, 2009; HELFRICH et al., 2007).

Based on the aforementioned literature, the conceptualization of organizational culture can be described by two main perspectives: first by the process-oriented approach (see DENISON and MISHRA, 1995), which tends to explain the behavior manifestation through examining and interpreting underlying assumptions that are adopted, and second by the type-oriented approach (see CAMERON and QUINN, 2006), which splits organizational culture to a range of ideal criteria or dimensions that can be classified into several types to simplify the understanding of cultural aspects of organizations (LIM, 1995; TAN, 2019).

- *Cameron and Quinn organizational culture model*

In connection to organizational culture, CAMERON and QUINN (2006) adapted the CVF and introduced an organizational culture model, based on two dimensions: flexibility and discretion vs. stability and control; and internal focus and integration vs. external focus and differentiation (see Figure 3). They proposed four types of culture as Clan, Adhocracy, Market, and Hierarchy. For each culture, it is supposed to have a competing value and has specific features that distinguish it from other cultures, but that doesn't mean that there is a good or bad culture. Instead, any organization could have a mixture of the four types in such a way to deal with its internal and external needs. Besides, CAMERON and QUINN (2006) proposed an instrument to measure the organizational culture named by organizational culture assessment instrument (OKAI).

The clan culture is considered as a sociable environment. In this theme, organization is like a big family with a lot of shared value among their members. Leaders or managers are considered as mentors or parents. Organization's binding forces are loyalty and unity. This culture focusses on continuous development of all members, coherence, and teamwork. Success criteria depend on the internal environment and the happiness of the employees (CAMERON and QUINN, 2006; VLAICU et al., 2019). Whereas adhocracy culture is an energetic and creative working environment where employees are more willing to take risks, and leaders are visionaries and ambitious. The bonding materials are experimentation

and innovation. Developing novel resources and growing is part of its long-term goals. Creativity and innovations are considered to be an achievement. Such culture encourages individual ingenuity and freedom (CAMERON and QUINN, 2006; VLAICU et al., 2019).

Organizations with market culture are result-oriented, so, high performances are expected from the employees as the leaders are task-oriented. The success of an organization is based on victory or through achieving specific goals. Customer focus and win market competition is the main theme of work in this organization (CAMERON and QUINN, 2006; VLAICU et al., 2019). Whereas hierarchy culture working environment is formalized and structured. Members' roles are dictated by the procedures. Leaders take pride in their efficiency-based coordination. In this system, keeping the organization working without complexity is very crucial. Stability and efficiency are the organization's long-term concerns (CAMERON and QUINN, 2006; VLAICU et al., 2019).

- *Denison's organizational culture model*

Based on the CVF but using a process-oriented approach, Denison, and his colleagues (DENISON et al., 2003; DENISON and MISHRA, 1995; FEY and DENISON, 2003) utilized the cultural traits approach to develop an explicit model of organizational culture and effectiveness. In addition, they developed a measure for organizational culture known by Denison's organizational culture survey (DOCS). DENISON and MISHRA (1995) revealed that the four cultural traits, namely, mission, consistency, adaptability, and involvement were associated to several criteria of effectiveness. The best predictors of profitability were the traits of mission and consistency, where the best predictors of innovation were adaptability and innovation, and the best predictors of sales growth were adaptability and mission traits.

Denison's model, as shown in Figure 4, includes four cultural traits are necessary in any effective organization. The first trait is involvement, where the effective organizations should empower all members in their activities, consider the teamwork as primary building block of their structure, and improve their members' capability and skills at all levels (BÖCKERMAN, 2015; TJOSVOLD, 1998). Members at all levels are committed to their work and feel themselves like shareholders of the organization. They feel that they have a right and voice in decisions making that will affect their work. Besides, they consider the organizational goals as it's their own goals (K. E. JOSEPH and DAI, 2009; MENG and BERGER, 2019; SHOLEKAR and SHOGH, 2017).

Consistency is a trait of high coordination, integration, and harmony within an organization, which generates a strong culture in terms of consistency and agreement. In this type of culture, a set of shared values directs the members' behavior, so leaders and members easily reach an

agreement even when they have diverse opinions, which minimize contradictory and misleading behaviors (O'REILLY, 1989). Organizations with a strong consistency culture reflect stability and internal integration, a high degree of conformity and a high resistance to change (FEY and DENISON, 2003).

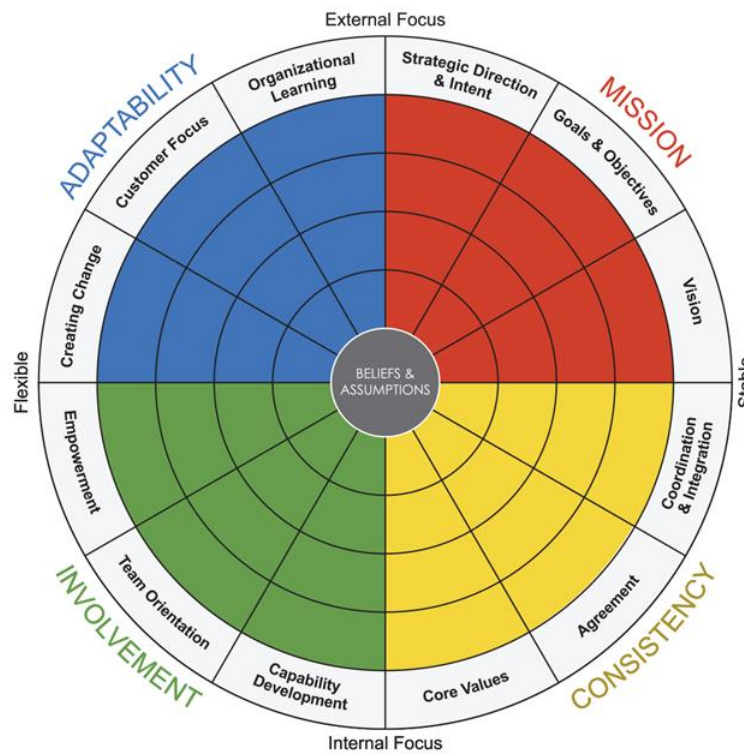


Figure 4. Denison’s organizational culture model  
 Source: Adopted from (FEY and DENISON, 2003)

In contrast to the consistency trait that emphasizes internal integration and compliance, adaptability is another trait that should emerge to cope with the external environments of any organization. According to (CALORI and SARNIN, 1991), adaptable organizations are more likely driven by the customers’ and market demands, adopt new ideas, take risks, and have the ability and skills to create change continuously (DO et al., 2016). Therefore, organizations should have the capacity to respond to incoming signals and adjusted their strategies accordingly (DEVERELL and OLSSON, 2010). This type of culture is the best fit for the rapidly changing organizational environments where flexibility and fast response are mandatory (NGO and LOI, 2008).

Finally, according to DENISON and MISHRA (1995), the effective organization should pave the way to accomplish its' mission by owning a clear sense of the strategic directions that helps in achieving its organizational objectives and in outlining a vision for its future (JARRAR, 2004; M. A. KHAN et al., 2010). A clear organizational mission acts as a motivating force within the organization in which the organization's members when they believe in and attached to they tend to perform extra efforts and innovate new ideas to accomplish it (MCDONALD,

2007). Thus, for an organization to survive, and to be competitive, it essentially needs to convert its mission into organizational norms and values that direct organization members' behaviors and practices (CRAFT, 2018) in which any change in the organization's mission requires a change in the other aspects of its organizational culture.

In brief, according to CVF, organizations should choose the most suitable culture that fits with its aims and purposes, which ranges from “versatility and pliability on one end to steadiness and durability on the other end”(CAMERON, 2009, p. 2). As some organizations are seen as effective if they are innovative, adaptable, and creative, others are viewed as efficient if they are more stable and consistent (CAMERON, 2009). Hence, organizations are invited to keep the balance between internal and external issues and to be ready for changes whenever there is a need (DEVERELL and OLSSON, 2010; SCHEIN, 1990). Yet, the CVF is one of the best frameworks for studying organizational culture and its consequences (YU and WU, 2009).

In this study, Denison’s cultural model has been adopted to measure the organizational culture. Despite the terminology differences, Denison's model appears to reflect a converging meaning of the CVF that developed by QUINN and ROHRBAUGH (1981); (1983). However, Denison's model conceptualizes organizational culture using the process-oriented approach, that approach enables any organizations to evaluate the strengths and weaknesses of their cultural traits (TAN, 2019). Given that organizations should maintain the balance between internal integration (stability value), and external adaptation (flexibility value), there is a need to be strong in all cultural traits (DEVERELL and OLSSON, 2010; HITT et al., 2017; SCHEIN, 1990).

Indeed, Denison’s model is often adopted as a diagnostic instrument to profile specific organizations, and to determine how strong or weak are their cultural traits compared to their competitors. So, they can alter or cultivate their organizational culture to maximize its effect on their organizational effectiveness (DENISON et al., 2003). Nevertheless, the Denison’s cultural model has been selected over other organizational culture models because of its empirical validity like a robust framework to evaluate and manage a complicated construct as the culture of the organization (DENISON et al., 2014). Also, it is driven by absence of Denison’s model implication in Jordanian context.

### **2.3 Leadership styles**

The term leadership was utilized to determine the characteristics of trustworthy leaders who are responsible to guide individuals in both bad and good circumstances (GEORGE, 2000). As described by YUKL (1989), the vision, mission, and strategies of the organization are affected by the organization's leaders, also, they are able to affect the commitment of employees and compliance to accomplish the organizational objectives, to encourage the homogeneity and

integration of the organizational members, and to formulate and change the organization's culture. Then, leaders through their leadership skills and behaviors hold the power to produce the changes, build the trust, create the vision, create the integration, encourage and motivate their followers (E. WALLACE and CHERNATONY, 2009).

The literature offered several theories in trying to determine the characteristics of the leadership which can be categorized into six main theories: great man theory, personal traits theory, behavioral theory, contingency or situational theory, influence theory and relational theory (DAFT and LANE, 2005). The 'Great Man' theory is an early stage of studying the leadership, which adopted a belief that a leader who often thought of as a man is born with certain leadership traits and natural abilities of power and influence. Accordingly, a leader is born and naturally evolved to influence others to follow (DAFT and LANE, 2005; OGBONNA and HARRIS, 2000).

Along the same vein, the personal traits theories focused on identifying the personality traits that define successful leaders and distinguish them from non-leaders. Personal traits theory assumed that if traits can be determined, the leader can be predicted or even trained. Thus, the quality of personal traits such as physical, mental, and personal attributes can make a difference between an effective and ineffective leader (VROOM and JAGO, 2007). Although the personal traits theory failed to determine a common traits list that ensures leadership success, still defining successful leadership characteristics is of great interest until the present day. However, the weakness of personal traits theory in defining a universal set of leadership traits directed the research toward the style and behavioral approaches to study what leaders do instead of what leaders is (DAFT and LANE, 2005; OGBONNA and HARRIS, 2000).

The behavioral theories, as reported by DAFT and LANE (2005), have been appeared firstly in the studies of Lewin and his colleagues during the 1930s when they examined two different leadership styles, including autocratic and democratic. Autocratic leader observed as a power-centric leader who gains and derives power from the position, control of rewards, and compulsion. On contrary, Democratic leader perceived as a power delegator leader who gains and derives power from his followers' respect and loyalty, fosters participation and followers' satisfaction, and relies on his followers' knowledge and skills for accomplishing tasks.

The behavioral theories gained extensive attention during the 1950s and 1960s at Ohio State University, and the University of Michigan, which results in a series of studies that concern of how leaders behave, or how leaders interact with their followers, no matters what leaders' traits are (DAFT and LANE, 2005; OGBONNA and HARRIS, 2000). Further, it was extended to study how effective leaders differ in their behavior, and to study leaders' behaviors toward

followers and how those behaviors associate with leadership effectiveness (DAFT and LANE, 2005).

VROOM and JAGO (2007) argued that neither traits theories nor behavioral theories were able to provide a solid body of scientific evidence in interpreting the leadership effectiveness, as both ignore the significant role that the contextual or situational factors play in determining leadership effectiveness. Yet, the behavioral theories of leadership were a forwarded step towards considering the situational variables influence on leadership effectiveness (DAFT and LANE, 2005; OGBONNA and HARRIS, 2000).

The contingency and situational theories argue that there are no best styles or traits that could fit the leaders, but the leader's quality depends on the situation and the task structure. The essence of the theories is that leaders' effectiveness relies on their judgment and evaluation of the situational factors that affect their selection of the appropriate style to deal with each circumstance separately (see FIEDLER, 1978; HOUSE, 1996; VROOM and JAGO, 2007). So, one might find himself involuntary in certain circumstances or events to demonstrate or perform supplementary leadership character, in other words, contingency or situation creates the leader. Major situational variables can be classified as the followers' characteristics, the work environment and tasks characteristics, and the external environment (DAFT and LANE, 2005; OGBONNA and HARRIS, 2000).

Influence theories emerge from the simple definition of leadership as the power of influence. So, it focuses on influence processes between leaders and followers, especially the informal influence which relates to leadership influence that originates from the leader's qualities and charismatic personality rather than the leader's position or formal authority. These theories are more concerned with the soft forces that leaders could perform to alter or enhance their follower behavior by creating an inspiring vision or reshaping some organizational culture aspects required to attain it (DAFT and LANE, 2005; FRENCH and RAVEN, 1959).

Charismatic leadership style considered to be a good example of this theory where leaders can inspire and motivate followers in their organizations to perform extra efforts more than what they normally do, regardless of organizational obstacles and personal loss (DAFT and LANE, 2005; HOUSE et al., 1991). Yet, leaders are often gaining power from two main sources, their organizational position and the individual characteristics and skills that they have. Unlike personal power, which can be developed and learned, position power seems to have its limitation as it can disappear if the position has lost. Therefore effective leaders should rely on both types of power to influence their followers (GONCALVES, 2013; SINGH-SENGUPTA, 1997).

The relational theories is a shift back towards 'one best way to lead' view in explaining the leadership concept, in which it focuses on the interpretational relationships between the leaders and their followers and how both influence each other (for example AVOLIO et al., 2004; BASS and AVOLIO, 1994). The transactional-transformational leadership theory is one of the most significant example of the relational theories (DAFT and LANE, 2005). The transactional-transformational theory assumed that the leaders could employ different styles for leading their followers (BASS and AVOLIO, 1994; KELLER, 2006; MACIT, 2003).

While transactional leaders establish an exchange procedure in dealing with their followers, including rewards against performance, or punishment against mistakes. The main concern of transactional leadership style is achieving targets and following the role (ANTONAKIS and HOUSE, 2014; AVOLIO et al., 2004; MACKENZIE et al., 2001; PILLAI, 1999). The transformational style focuses on inspiring and creating change by cultivating their follower's behaviors, values, and beliefs to support the needs of the organization. This leadership style is mainly concerned with their follower's stimulation, development, and motivation, and also has a significant direct influence on the culture of the organization (BASS and AVOLIO, 1994; XENIKOU and SIMOSI, 2006; YAMMARINO and DUBINSKY, 1994).

#### **2.4 Measuring leadership style**

Finding the best leadership styles is still challenging due to the multidimensional nature of the concept. Given that, as previously discussed, several theories were developed to define and detect the best leadership style that has the most contribution to organizational performance. The leadership literature is full of models or frameworks to measure leadership styles and behaviors. Even though that each model has been developed based on certain theoretical approaches, every model emphasizes on leader's significant role in managing and sustaining organizational performance (DAFT and LANE, 2005; OGBONNA and HARRIS, 2000).

In the current study, one of the well-known relational theories will be adopted as a theoretical ground in defining the leadership style that has the most impact on the other research variables. The transactional and transformational leadership styles theory of BASS (1990) has been adopted to have the potential to serve the scope of the current study of identifying the associations between organizational culture and leadership style, further to examine their impacts on such variables as job satisfaction, organizational commitment, and organizational performance. Transactional and transformational leadership styles are extensively accepted paradigms in the leadership literature (BUIL et al., 2019), and both styles are necessary to enhance leadership effectiveness (BASS, 1990; DAFT and LANE, 2005).

The transactional leader is widely viewed as an incentive-oriented leader who builds an exchange relationship with its followers by satisfying their needs based on predefined standards and placing close control over the followers' poor or outstanding performance in order to take his or her actions (PIETERSE et al., 2010). According to BASS and AVOLIO (1994) transactional leadership style can be classified, in terms of leadership actions, into a positive contingent reward action in response to superior performance, and into a negative contingent punishment action in response to poor performance. In other words, the transactional leadership style focuses on achieving high performance regardless of other factors such as the culture of organization and followers' expectations. Yet, prior research empirically supported the association between the transactional leadership style and organizational performance (MACKENZIE et al., 2001; ZEHIR et al., 2011).

On the contrary, the transformational leader influences followers' performance by providing inspiration, motivation, and support to perform above the expectation (PODSAKOFF et al., 1990). Transformational leadership is defined as a "style of leadership that transforms followers to rise above their self-interest by altering their morale, ideals, interests, and values, motivating them to perform better than initially expected" (PIETERSE et al., 2010, p. 610). According to YUKL (1989), transformational leadership contributes to change organization members' attitudes and behavior by influencing and reshaping the values, beliefs, and assumptions of organization members and enhances their commitment toward organizations' mission, objectives, and strategies.

The transformational leadership style involves four different leadership behaviors: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (BASS and AVOLIO, 1994). Briefly, idealized influence derives from leader's charisma and personality traits that relies on their moral and ethics and reflects leader's confidence to act as ideal models for followers. Inspirational motivation involves creating and articulating an interesting and motivational vision that is necessary to inspire followers to perform beyond expectation. Intellectual stimulation denotes to leaders that foster followers' creativity innovations by challenging them with new ideas in order to identify new ways to solve problems. Finally, individualized consideration refers to leader who pays a great attention to followers' individual needs for development and growth by providing coaching, mentoring, and training (BUIE et al., 2019; PIETERSE et al., 2010).

## **2.5 Organizational performance**

Organizational performance is showing the ability of organizations to achieve their targeted objectives and sustain their existence. Affinely, if an organization couldn't reach a certain level

of performance, more likely it will not be present over the long run. For instance, in profit-based organizations, organizational performance is often measured by organizations capability to sustain their profitability or financial success (SAWHILL and WILLIAMSON, 2001). Whereas, in nonprofit-based organizations, organizational performance is usually measured by their ability to secure the financial and human resources required to perform their mission (BARUCH and RAMALHO, 2006). Indeed, measuring nonprofit-based organizations performance is far more challenging (SAWHILL and WILLIAMSON, 2001).

The organizational performance is a multidimensional construct (DAVIS and PETT, 2002; RICHARD et al., 2009). A narrower domain includes other performance measures besides profitability or financial performance such as market performance, mission performance, and stakeholders' performance (RICHARD et al., 2009). The market performance relates to the product and service quality, innovation and creativity, reputation, and other marketing factors, whereas mission performance focuses on measuring the degree of organization's mission fulfillment. Stakeholders' performance reflects staff, management behaviors and attitudes towards their organizations as well as, other stakeholder expectations (RICHARD et al., 2009).

In management research, there are different ways to define and assess organizational performance using a broader construct such as organizational effectiveness and organizational efficiency, which considered to be the most dominant measures of organizational performance (DAVIS and PETT, 2002; RADNOR ZOE and BARNES, 2007; RICHARD et al., 2009). Effectiveness is a more comprehensive notion that captures organizational performance and efficiency, and involves a broader set of measures related to internal or external issues such as quality, growth, innovation, and customer satisfaction (RICHARD et al., 2009). It refers to the extent to which the organization is achieving appropriate outcomes (RADNOR ZOE and BARNES, 2007; RICHARD et al., 2009). Efficiency refers to the ratio of process related outputs to related inputs in which it focuses on evaluating aspects such like productivity, and resources utilization (DAVIS and PETT, 2002; RADNOR ZOE and BARNES, 2007). Yet, it's essential for organizations frequently to evaluate its efficiency or effectiveness in order to retain its market position and value.

Employees work related outcomes such as job satisfaction and organizational commitment are considered as antecedents or as nonfinancial indicators organizational performance, due to it is significant impact on the organizational members attitudes and behaviors. Both variables have been widely proven as mediator or moderator among deferent organizational variables and organizational performance (ELIYANA et al., 2019; GREGORY et al., 2009). Hence, its valuable to consider the employee performance outcomes such as job satisfaction and

organizational commitment when measuring the organizational performance. Prior research highlighted the importance of increasing employees job satisfaction and their organizational commitment to enhance organizational performance (PATTERSON et al., 1997). Both factors organizational commitment and job satisfactions are related to critical organizational outcomes such as absenteeism, turnover intention (FALKENBURG and SCHYNS, 2007), and job performance (FU and DESHPANDE, 2014).

### *2.5.1 Job satisfaction*

Job satisfaction is an important measure of determining the emotional feeling level that employee's holds toward his or her job (YOUSEF, 2000). It measures employees' reactions in response to the continuous changes within the organization. Job satisfaction is widely examined concept in management research due to its significant contribution in determining individuals' reactions or attitudes in response to their job or specific aspects of their job. Individuals' attitudes can originate from their perceptions of what the job offers compared to what they expect, whether the job is fulfilling their needs, and to which degree the job is satisfying their desires. Therefore, employees' attitudes toward their job, whether they are satisfied or dissatisfied can be reflected in their behavior and performance (SPECTOR, 1985).

Job satisfaction has been defined in different ways according to the researchers' needs. Yet, job satisfaction definitions have implied two main ideas: emotional reactions and cognitive evaluation. Emotional reaction reflects the positive affective or emotional feeling that are connected to one's job. Consistent with this idea, AUER ANTONCIC and ANTONCIC (2011, p. 590) defined job satisfaction as "the degree to which employees like their jobs". ANTÓN (2009, p. 189) states that "Job satisfaction results from the emotional response to the events that employees experience in organizations". Particularly, that is the definition of the so-called affective job satisfaction, which often associates with the extent a good mood or positive feeling can be perceived from one's job (MOORMAN, 1993).

The second idea about job satisfaction is known by cognitive job satisfaction, which relates to attitudes that derive from rational or logical evaluation of specific aspects or conditions of one's job. Cognitive job satisfaction defined by MOORMAN (1993, p. 262) as "an appraisal based on comparisons which do not rely on emotional judgments, but instead are evaluations of conditions, opportunities or outcomes". In the same line of thinking, MUMFORD (1970, p. 72) considered job satisfaction as "the degree of fit between organizational demands and individual needs, and that the employee's satisfaction with his job and with work performance will only be high when this fit is a good one". A more comprehensive definition offered by SPECTOR (1997, p. 2) who consider job satisfaction as "a global feeling about the job or related

constellation of attitudes about various aspects or facets of the job”. However, most of recent researchers focus on cognitive evaluation instead of underlying needs.

Strong empirical evidence shows that a high level of job satisfaction is associated with the employee’s overall motivation, and it has a significant impact on individual’s performance (JUDGE et al., 2001; POOL, 1997). Hence, one might argue that the level of job satisfaction can be a major predictor of individuals attitudes and behaviors. Based on this argument, several theories had been developed in trying to explain what factor influence or motivate individual attitudes and behavior. According to DINIBUTUN (2012) , motivational theories can be classified into two approaches: content theories and process theories.

Content theories, such as Maslow’s hierarchy of needs theory, Alderfer’s ERG theory, and Herzberg’s two-factor theory, attempt to explain those necessary things that motivate individuals at their job. These theories are concerned with identifying what individual needs from their job, and the goals they chase to satisfy these needs. Content theories focus on the nature of the people’s needs and the role it plays in motivating their behaviors at work. Whereas process theories, such as Vroom’s Expectancy Theory, Adams’s Equity Theory, and Locke’s Goal theory, focus on the factors that determine a person's willingness or persistence at their job. These theories are concerned more with determining how behaviors are originated, evolved, and sustained, and what processes are required to direct people's behavior (for more see DINIBUTUN, 2012).

According to DANCHEV and SEVINC (2012), the level of job satisfaction is affected by first, the financial aspect and its related aspects in which if these aspects increase, the level of job satisfaction will increase), and second by the non-financial aspect such as: organizational culture, leadership style, motivation, work stress, and human resources management practices, which may positively or negatively influence employees job satisfaction level. So, based on the level of job satisfaction, the employee will like or dislike to contribute or support organizational performance. Besides, job satisfaction has been associated with many important organizational variables such as turnover intention and absenteeism, commitment, and job performance (ANTÓN, 2009).

Leadership styles and organizational culture have been considered as two major factors that affect job satisfaction (AL-SADA et al., 2017; LOK and JOHN, 2004; TSAI, 2011). The study conducted by AL-SADA et al. (2017), using a sample from the educational sector, reported that significant positive associations were found between supportive culture, participative-supportive leadership, and directive leadership with job satisfaction. In an empirical study, LOK and JOHN (2004) examined the effect of organizational culture and leadership style on

managers' job satisfaction using a cross-national sample from Australia and Hong Kong. The study revealed that innovative and supportive cultures and a consideration leadership style, showed positive effects on managers' job satisfaction while an initiating structure leadership style showed a negative effect on managers' job satisfaction. Furthermore, TSAI (2011), in his study, empirically found significant positive relationships between organizational culture and leadership styles, and both had a positive impact on job satisfaction.

### 2.5.2 *Organizational commitment*

Organizational commitment is another essential element that is receiving much attention in the organizational literature, as it defines how strong is the bond that joins organizations members with their organizations, and it is an important factor in reflecting individual attitudes, intentions and behaviors (CLIFFORD, 1989). Organizational commitment determines how strong is the belief in or acceptance of the organization's values and beliefs, the desire to make a great effort on behalf of the organization, and the continuous intention to stay a member of the organization (MAYER and SCHOORMAN, 1992). Thus, as much as selecting a suitable organizational culture is essential for organizational success, ensuring the necessary level of organizational commitment among the organization's members is extremely important (FU and DESHPANDE, 2014).

Despite the importance of studying organizational commitment, there was no consensus on its definition. Scholars have defined, studied, and measured the organizational commitment concept in different ways, which led to criticizing the construct in terms of its validity to reflect the exact meaning of the concept and its ability to provide consistent results (CLIFFORD, 1989; MAYER and SCHOORMAN, 1992; MOWDAY et al., 1979). According to MOWDAY et al. (1979), to understand organizational commitment clearly, it is essential to distinguish between two facets of organizational commitment: attitudinal commitment and behavioral commitment. They suggest that the various definitions of organizational commitment are centered around these two aspects.

Attitudinal commitment explains the state in which individuals identify with an organization and its goals, and then show a desire to maintain their membership to achieve these goals. In this sense, MOWDAY et al. (1979, p. 226) defined organizational commitment as "the relative strength of an individual's identification with and involvement in a particular organization". Consistent with this view, attitudinal commitment can be viewed as a positive emotional state that an employee holds based on the judgment that he or she makes on the work situation of the entire organization. That emotional state implies a sense of identification with, involvement in,

and loyalty to the organization (CLIFFORD, 1989). Thus, attitudinal commitment view is concerned with the effect of commitment attitudes on behavior.

On the contrary, behavioral commitment view focuses on the impact of behavioral commitment on attitudes. Thus, behavioral commitment concerns more with identifying the behavioral pattern that individuals use to show their commitment and how it alters their attitudes (MOWDAY et al., 1979). The behavioral commitment is the state in which individuals show their commitment by being attached more to organizations' activities as a result of an exchange relationship with or investment in their organization. Thus organizational commitment refers to the extent to which individuals perceive themselves attached with or stuck in a particular organization as a response to accumulated investment benefits they have gained, and they are willing to maintain membership because they are afraid of losing these investment benefits (CLIFFORD, 1989). However, in the recent research, attitudinal commitment approach has been found to be the dominant approach in studying organizational commitment.

Another view of organizational commitment concept has been proposed by O'REILLY and CHATMAN (1986, p. 493) when they conceived organizational commitment as “an individual's psychological bond to the organization, including a sense of job involvement, loyalty, and a belief in the values of the organization”. They proposed three stages of commitment, namely, compliance, identification, and internalization. The compliance stage refers to the state in which individuals adopt organization values and beliefs and develop a course of acts only to get rewards, mainly extrinsic rewards. The identification stage of commitment occurs when individuals feel pride in belonging to their organization and wish to maintain a stiffening and self-defining relationship with it. Finally, the internalization stage shows a higher degree of commitment in which individuals conceive an organization's values and beliefs as their own and wish to sacrifice in order to achieve the organization's goals (O'REILLY, 1989). Yet, an individual might show a combination level of commitment that varies in terms of these three stages.

ALLEN and MEYER (1990) argued that the diverse conceptualization of organizational commitment differs in the way of identifying the psychological state that reflects in commitment, the antecedent conditions that are leading to its development, and the expected behaviors that result from commitment. Accordingly MEYER and ALLEN (1991, p. 67) have defined organizational commitment as “a psychological state that characterizes the employee's relationship with the organization, and has implications for the decision to continue or discontinue membership in the organization”. They suggested that organizational commitment as a psychological state is reflecting an individual's willingness, need, and a sense of obligation

to maintain membership in an organization. In order to integrate the various conceptualization of organizational commitment, ALLEN and MEYER (1990), MEYER and ALLEN (1991) and MEYER et al. (1993) had proposed the three-component model of organizational commitment. The model has been developed based on three conceptualization themes, namely, affective attachment, perceived cost, and obligation.

Affective attachment theme is more concerned with understanding the emotional state that determines how strong is the emotional links between individuals and their organization. It is the state in which individuals' values became congruent with organizational values. This emotional state entails an identification with, an involvement in and enjoyment the work with the organization (JAROS, 2007). Based on the affective attachment theme, ALLEN and MEYER (1990) proposed affective commitment as one of the three components that determines individual's commitment. In this sense, affective commitment defined as the relative strength of an individual's emotional identification with, involvement in, and attachment to an organization (FALKENBURG and SCHYNS, 2007).

The perceived cost theme is based on the evaluation of the cost of staying with the organization compared to potential cost of leaving it. This cost includes both economic and social cost (JAROS, 2007). This theme explains the state of commitment in which individuals remain with the organization to fulfill their personal needs and maintain the accumulated investment they have made, or to avoid the substantial loss that results from leaving it because their other options are limited (FALKENBURG and SCHYNS, 2007). To represent this theme, ALLEN and MEYER (1990) had proposed continuous commitment as one of the three components that determine an individual's commitment. Continuous commitment thus defined as the extent to which individuals perceive a sense of being locked in the organization, due to the important investment they have made within the organization and the high cost associated with leaving it (JAROS, 1997).

The third theme focuses on state in which individuals experiences a sense of obligation or moral responsibility towards the organization. This state of commitment explains why individuals remain with organization even if their alternatives are not limited. According to JAROS (2007), this type of commitment reflects the norms of reciprocity in which individuals find themselves in a position ought to pay back the valuable efforts the organization has made for them. To cover this theme, ALLEN and MEYER (1990) had proposed normative commitment as one of the three components that determine an individual's commitment.

The recent view of MEYER et al. (2006) for the normative commitment reshape the construct to involve two facets that could explain the norm of reciprocity reflected in normative

commitment. That are, indebted obligation that concerns more with the need to meet the organizational expectations, and moral imperative that reflects the persistent pursuit of meeting valued results (JAROS, 2007). The former seems to correlate with some aspect of continuous commitment, whereas the later associate with some aspects of affective commitment (MEYER et al., 2006).

Contrary to the previous definitions and conceptualizations of the commitment concept, in which a combination of psychological states was labeled under the same concept and has distinguished among the targets or the foci of which one usually holds commitment. KLEIN et al. (2014) argued that one's commitment should be bounded to or associated with a specific psychological state, and its measurement should be applicable regardless of the targets. Accordingly, KLEIN et al. (2012) viewed commitment as a unidimensional and target-free concept and defined commitment as "a volitional psychological bond reflecting dedication to and responsibility for a particular target". This recent view could suspend the ambiguity behind several definitions of such a complex construct as commitment.

The role of organizational commitment in enhancing the organizational performance is firmly agreed among the organizational scholars, due to its contribution in determining and shaping organizations' members attitudes and behaviors toward their organizations (MAYER and SCHOORMAN, 1992; MOWDAY et al., 1979), and it can be seen as antecedent for such organizational outcomes as job satisfaction, performance, motivation, turnover, attendance and absenteeism (MOWDAY et al., 1979; YOUSEF, 2000).

## **2.6 Relationships and Hypotheses Development**

This research aims to answer specific but interconnected questions regarding the relationships among organizational culture, leadership styles, job satisfaction, organizational commitment, and organizational performance. These relationships will be briefly discussed in order to generate the research hypotheses.

### *2.6.1 Organizational culture and leadership styles link*

Many studies have revealed that organizational culture and leadership play a significant role in achieving positive organizational performance (OGBONNA and HARRIS, 2000; ZEHIR et al., 2011). The organizational culture is the specific mechanism that organizations are employed to complete their organizational functions. It acts as a social glue of organization members integration and homogeneity and it distinguishes one organization from another (IMRAN U. KHAN et al., 2012). In fact, organizations leadership work as a mean of fostering the organizational culture among organization members.

The organizational culture assessment is a necessary task that organizations often perform to determine their organizational culture strengths and weaknesses, and to know whether it fits with the main organization's purposes. Based on this assessment, organizational leaders establish their plans and strategies to solve weak points and build on strong points. The backbone of fostering and communicating the organizational culture is the leaders, as they are responsible for simplifying and transform the complex concepts into understandable meaning, that can be illustrated and performed by the organization members (TSUI et al., 2006). Three different views can explain the relationship between organizational culture and leadership styles: the functionalist view, attribution view, and contingency view.

According to the functionalist view, organizations' leaders considered as maestros or draftsman for culture change through their own substantive, actions, and practices. This role appears through the start-up phase of organizations or through leaders' response toward the internal, and external adaptation, where the organizations' founders or leaders outline the organizational culture based on their beliefs, values, strategies, visions, and different ways of doing things (DENISON and MISHRA, 1995; SCHEIN, 1990). The attribution view claims that leaders serve a symbolic function to achieve the organization's choices and results. Hence, because of the high level of power and control that leaders have, the organization's members tend to attribute good or bad organizational outcomes to leaders' behaviors and practices (TSUI et al., 2006). Whereas the contingency view claims that leaders' importance obviously can be seen through the emergency situations such as crises, conflicts, and problems that an organization may face during its operation executions (HOUSE et al., 1991; SARIHASAN et al., 2022).

As previously stated, once a company develops a strong organizational culture, it is difficult to change or modify that culture. As a result, rather than changing the culture, it would be more efficient to improve or adapt the employed leadership style within the organization (OGBONNA and HARRIS, 2000). Strong evidence affirms the functionalist view, which holds that leaders have the ability to shape and evolve the culture of their organization. As a result, leaders can mold or embrace a set of behaviors that can be learned and observed as a valid way of thinking and problem-solving (PFEIFER et al., 2005; TSUI et al., 2006). These arguments support the creation of the following hypotheses.

***H1 – There is a significant links between organizational cultural traits and leadership styles***

### *2.6.2 Organizational culture and organizational performance link*

There are numerous studies that have been examined the possible impacts of organizational culture on organizational performance (CHILLA et al., 2014; OGBONNA and HARRIS, 2000; YU and WU, 2009), or effectiveness (DENISON et al., 2003; DENISON and MISHRA, 1995;

GREGORY et al., 2009). In many cases, the results have revealed a crucial link between the organization's culture and its performance (CHILLA et al., 2014; OGBONNA and HARRIS, 2000; ZEHIR et al., 2011). Although many studies have been reporting a positive association between both variables, most of them tend to differ in terms of organizational culture measures that are used and for organizational performance measures as well (ALVESSON, 1989; LIM, 1995). Indeed, the inconsistency or debate about a comprehensive definition of organizational culture is the primary source of confusion of understanding or interpreting organizational culture-performance links (ALVESSON, 1989; LIM, 1995).

Many critics have pointed to the absence of strong empirical foundations that support organizational culture-performance link (BARNEY, 1986; LIM, 1995; TAN, 2019). According to BARNEY (1986) organizational cultures studies implications are limited to interpreting how organizations with high financial performance can sustain their success and how less successful organizations can achieve the average performance. But not to explain how organization with less financial performance, by altering or modifying their culture, can get superior financial performance. LIM (1995) argued that the contribution that organizational culture holds towards understanding the reality of organizations seems to be a more descriptive or explorative instrument rather than predictive one, which means absent of rigorous conclusion that organizational culture might be a predictor for organizational performance. LIM (1995) conclusion raises attention regarding whether an organization's culture able to predict its performance or not. Thus, if the organizational culture not able to predict organizational performance, developing a high-performance culture will be according to faith rather than empirical evidence (TAN, 2019). However, TAN (2019) claimed that the failure of previous studies in proving the culture-performance link attributed to the weak conclusion validity.

Most of the earlier studies employed a case study or qualitative approaches to examine the presumed link. As the case differs from each other, it was difficult to generalize the results outside the study sample (LIM, 1995). However, the quantitative approach using survey instruments with strong construct validity seems promising as a valid tool to establish the organizational culture-performance link (LIM, 1995; TAN, 2019). Although the absence of theoretical argument in earlier organizational studies that supports culture-performance link, promising arguments start to emerge via organizational economics to theorize the organizational culture-performance link. Mainly, in proving causality of the relationships (TAN, 2019).

Organizational economics research, especially in human resource management (HRM) impact on organizational performance (BOSELIE et al., 2005; PAAUWE and BOSELIE, 2005;

SINGH, 2010; VAN DEN STEEN, 2010a, 2010b; VANHALA and STAVROU, 2013), have begun to model presumed link between organizational culture as shared beliefs and organizational performance. VAN DEN STEEN (2010b) argued that organizations have a tendency toward homogeneity in shared beliefs over time that unintentionally originate in HRM practices through screening, self-sorting, and manager-directed joint learning.

During the screening process, managers tend to choose applicants who hold similar beliefs, as people tend to perform better with others who share similar beliefs. In this sense, organizational performance will depend on managers' correct decisions. Lastly, self-sorting happens when applicants become members and contribute to select new members who share similar beliefs as themselves. The learning process occurs through learning from shared experiences as each member's beliefs will change over time (VAN DEN STEEN, 2010b). Based on the Van den Steen model, the learning process clarifies the mechanism of organizational culture learning that is directed by organization managers.

Strategic management scholars employed two main theoretical frameworks that can describe how organizations maintain their sustained performance: the Industrial Organization View (IOV) where competition in the product and factor markets has great importance, in which organizational external environment determines the organizations' strategic actions that need to be taken to enhance their competitiveness (MEILAK and SAMMUT-BONNICI, 2015; PORTER, 1981), and the Resource-Based View (RBV) where organizations' competitive advantages can be achieved through their unique and inimitable resources, so organizations shall pay great attention in developing such valuable assets (EISENHARDT and MARTIN, 2000; STILES and KULVISAECHANA, 2004). Accordingly, both views, IOV and RBV, emphasize the role of industry effect and human resources effect in maintaining sustainable organizational performance.

In conclusion, the organizational culture-performance link has been extensively discussed from different perspectives. Most of the literature acknowledged the direct or indirect link between the organizational culture and performance. However, as both constructs depend on the organizations' human resources, it is essential to explore other factors that influence the presumed link. VAN DEN STEEN (2010a) claimed that organizations with strong shared beliefs, their employees enjoy more delegation, less monitoring from their manager. They also experience a higher level of satisfaction, motivation, and coordination. Such organization is more likely to maintain higher performance. Accordingly, the following hypothesis is proposed:

***H2 - There is a significant links between organizational cultural traits and organizational performance***

### *2.6.3 Leadership styles and organizational performance link*

Organizations' leaders always focus on utilizing the available organizational capital, physical, and human resources to reach the demanded organizational performance. All leadership theories have aimed to determine the characteristics, traits, and behaviors that enhance leadership effectiveness which in turn resulting in an improvement in organizational performance. Thus, it is logically can be assumed that the link exists, but it could be a little bit difficult to determine which leadership styles could lead to successful performance or even cause failure performance (OGBONNA and HARRIS, 2000).

The effective role of the organization's leaders is widely considered essential to maintaining its sustainable performance. According to FIEDLER (1996), who suggested that leadership effectiveness often considered as a major determinant of superior or weak organizational performance. Thus, organizations are required to carefully choose their leaders and support them with the skills and training that necessary to ensure achieving the desired performance.

Leaders, through their leadership styles, hold the power of influence over their followers, and this influence might be a source of inspiration and motivation that drives organizations' members to perform beyond expectations, or it might lead to frustration and confusion that generate a performance reduction (DAFT and LANE, 2005).

OGBONNA and HARRIS (2000) and ZEHIR et al. (2011) argued that the leadership styles-organizational performance link has been implied by anecdotal rather than empirical evidence. However, prior research empirically aimed to identify which leadership style has the most impact on organizational performance by studying deferent form of leadership styles (MACKENZIE et al., 2001; OGBONNA and HARRIS, 2000; XENIKOU and SIMOSI, 2006; ZEHIR et al., 2011).

In a study, MACKENZIE et al. (2001) examined the impact of transformational and transactional leadership styles on sales performance. The study findings reveal that the transformational leadership style has stronger impacts on sales performance than the transactional leadership style. Nevertheless, the study emphasizes that leaders need to apply some features of transactional leadership style such as reward, and punishment in response to sales performance. This result is consistent with the finding of (WANG et al., 2010).

The study of XENIKOU and SIMOSI (2006) revealed that transformational leadership has an indirect effect on organizational performance through the mediation role of an achievement culture. That can be attributed to the role of transformational leadership in providing inspiration and intellectual stimulation that creates new ways of thinking and problem-solving.

OGBONNA and HARRIS (2000) offered empirical evidence that supports the association between leadership styles and organizational performance using a sample from UK companies. Three different leadership styles, namely, participative leadership, supportive leadership, and instrumental leadership, have been examined to clarify their relationships with organizational performance. The result suggested that leadership styles are indirectly associated with organizational performance. That is, through the mediation role of organizational culture.

A similar study had been conducted by ZEHIR et al. (2011) to clarify the leadership styles and organizational culture impacts on organizational performance. The study revealed that the leadership styles significantly correlated with organizational performance, and organizational culture mediated the relationships between various leadership styles and organizational performance. Briefly, they found a significant positive association between supportive, participative, and instrumental leadership styles with organizational performance. The previous results lead to establish the following hypothesis:

***H3 – There is a significant links between the leadership styles and organizational performance***

#### *2.6.4 The mediating role of job satisfaction and organizational commitment*

- *Organizational culture and leadership styles relationships with job satisfaction*

Organizational management literature is still offering extensive evidence concluding that organizational culture is one of the most important factors that influence employees' job satisfaction (AL-SADA et al., 2017; HABIB et al., 2014; LOK and JOHN, 2004; MENG and BERGER, 2019). Job satisfaction, as an individual's performance or effectiveness indicator, depends on the extent to which an organization's culture satisfies the individual motivational requirements WALLACH (1983). That means employees can be more efficient, satisfied, and preferred to work in a work environment that offers an organizational culture that matches their individual needs.

Consistent with this view, VAN DEN STEEN (2010a) stated that employees will experience a higher level of satisfaction when they share similar values and beliefs with their organizations, and the opposite is also true. SINHA et al. (2016) found a significant positive correlation between four culture traits and employees job satisfaction. Nevertheless, MENG and BERGER (2019) revealed that supportive culture has a positive and significant indirect impact on job satisfaction.

The leadership style is another important factor in determining employee job satisfaction, in which individuals' perception of the leadership styles that leaders employed is often affected

their job satisfaction level. The study conducted by LOK and JOHN (2004), using a cross-national sample of managers from Hong Kong and Australia, analyzed the impact of two styles of leadership on job satisfaction, namely consideration and initiating structure. Consideration leadership style is a more employees-oriented style that concerns more with followers' ideas and feelings in which emphasized interpersonal relationships and taking care of employees' needs. On the contrary, the initiating structure leadership style is a more task-oriented style that focuses on defining the duties and work relationships to achieve job goals. The study showed that consideration style had a positive impact on managers' job satisfaction, whereas the initiating structure leadership style was negatively affected managers' job satisfaction.

A similar finding had been reported in a previous study (see POOL, 1997). SALEEM (2015) concluded that transformational leadership positively enhances job satisfaction as it is responsible for creating an inspiring and motivating work environment. Whereas transactional leadership negatively impacts job satisfaction as it is mainly practicing the influence by applying performance-based rewards or punishments with little interest in finding motivations and building personal relationships.

- *Organizational culture and leadership styles relationships with organizational commitment*

Organizational commitment reflects the psychological and emotional states that bond an individual with the organization and shows the extent to which an organization's members identified with, believed in and being involved in their organization (MOWDAY et al., 1979; O'REILLY, 1989). Prior studies have been addressed several antecedents of organizational commitment such as organizational culture and leadership styles (AL-SADA et al., 2017; LOK and JOHN, 2004; MITIĆ et al., 2016).

On the one hand, organizational culture can be thought of as a social control system that includes a set of shared values, beliefs, and assumptions that an organization's members espouse as a valid recipe for dealing with the daily life of their organization and for achieving its goals as well. Organizational culture, therefore, can shape an organization's members' behaviors and attitudes towards their organization (O'REILLY, 1989; SCHEIN, 1990). On the other hand, leadership styles refer to the process of leading and influencing an organization's members to accomplish organizational goals. An organization's leaders have the power to influence the way of doing things within the organization, thus, the organization members' perception of the leaders' leadership styles and behaviors, automatically can affect their attitudes and behaviors towards their organization (MUTERERA et al., 2018).

MITIĆ et al. (2016), in a study to investigate organizational culture impacts on organizational commitment, have confirmed the existence of a significant relationship between both variables. Additionally, the result of the study supported the conclusion that managers, if they want to strengthen employees' commitment, they need to work on improving the culture of their organization.

According to AL-SADA et al. (2017), the employees' commitment, particularly teachers' commitment, can be developed by adopting a supportive organizational culture in the education sector. However, it is good to mention that some dimensions of organizational culture might differ in its impact on employees' commitment. That view has been reported in a study conducted by MESSNER (2013), in which in-group collectivism environment where employees have a sense of pride and loyalty towards their organization, they will show a higher degree of commitment. Whereas, in an environment characterized by a higher power-distance, the employees will demonstrate less commitment.

To this end, the organization leaders are supposed to foster an appropriate organizational culture that enhances the level of employees' commitment spontaneously they are expected to reevaluate and improve the leadership styles that they are used to. According to a study conducted STEYRER et al. (2008), there is a significant correlation between several leadership dimensions and organizational commitment. The results of the study revealed a positive association between the charismatic/value-based, team-oriented, participative, and human-oriented dimensions, and organizational commitment, meanwhile, the Self-protective leadership dimension was found to have a negative correlation with organizational commitment.

In an empirical study, ISMAIL et al. (2011) stated that a transformational leadership style has a significant positive relationship with organizational commitment, besides the study statistically confirmed that empowerment acts as a mediator in this relationship. Same result had been reported in previous study (AVOLIO et al., 2004). Indeed, one of the core values of transformational leaders is to inspire and stimulate followers and empower them to meet job goals.

In a recent cross-national study CHO et al. (2019) examined the relationships among two styles of leadership and affective organizational commitment in a sample of the US and Korean employees. The study revealed that the transformational leadership style has a positive relationship with affective commitment in both samples, but a stronger relationship was found in the US sample. Regarding the transactional leadership style, in the Korean sample, it was positively correlated to affective commitment. While, in the US sample, there was a negative

but not significant relationship with affective commitment. That result can be attributed to the contrasting cultural preferences among the examined samples, such as independence and self-direction of the US national culture versus interdependence and assigned direction of the Korean culture. Accordingly, organizations' leaders need to apply the best leading processes and influence techniques to ensure the desired level of organizational commitment to accomplish the mission of the organization.

- *Job satisfaction and organizational commitment relationships with organizational performance*

Employees' work attitudes are essential factors that determine the extent to which an organization accomplishes its mission. Prior studies have offered extensive evidence that emphasized the significant role that employees' job satisfaction and their commitment towards their organization contribute to enhancing its organizational performance (BAKOTIĆ, 2016; NIKPOUR, 2017; SHIU and YU, 2010; STEYRER et al., 2008). Indeed, both variables are often perceived as organizational performance indicators, in which the higher level of job satisfaction besides the strong organizational commitment leads to a relevant enhancement in organizational performance.

An empirical study conducted by BAKOTIĆ (2016) aimed to clarify the direction and intensity of job satisfaction-organizational performance link. The results of the study confirmed the existence of a clear link between job satisfaction and organizational performance in both directions, but the intensity was weak. However, the study suggested that job satisfaction has a stronger influence on organizational performance. SHIU and YU (2010), in their study, suggested that job satisfaction is significantly associated with organizational performance. Furthermore, job satisfaction has been found to have a statistically significant mediating effect on the relationships between transformational leadership behaviors and organizational performance (MUTERERA et al., 2018).

Strong organizational commitment also perceived as an antecedent of successful organizational performance in which employees who have a strong commitment towards their organization strive hard and exert beyond expectation to accomplish the desired organizational performance (MEYER and ALLEN, 1991). Several empirical evidence have been showed the existence of positive association between organizational commitment and organizational performance (ANDREW, 2017; ELIYANA et al., 2019; FU and DESHPANDE, 2014; NIKPOUR, 2017; STEYRER et al., 2008). ANDREW (2017) in his study revealed that there is a significant positive correlation between employees' commitment and organizational performance. Further,

he suggested that managers should pay more attention to strengthen employees' commitment towards their organization.

The study conducted by STEYRER et al. (2008) showed that there is a positive relationship between organizational commitment and organizational performance. The results of the study revealed that even when other relevant predictors of organizational performance were addressed, organizational commitment can still significantly predict organizational performance. Furthermore, the study supports the argument of considering the possible mediating effect of organizational commitment on the relationship between leadership behavior and organizational performance. According to NIKPOUR (2017), organizational commitment is an important factor due to its contribution to improving organizational performance, besides its role in strengthening the organizational culture impacts on organizational performance. Based on the above-mentioned discussion the following hypotheses have been derived:

***H 4 – Job satisfaction and organizational commitment play a significant role in explaining the relationship between organizational culture traits and organizational performance***

***H 5 – Job satisfaction and organizational commitment play a significant role in explaining the relationship between leadership styles and organizational performance***

Based on the above-mentioned discussions of the relationships among the research variables, Figure 5 presents the summary of the developed hypotheses that the current research is aimed to test and illustrates the research model. In addition, Table 1 offers a summary of the main and sub hypotheses derived from the previous discussion.

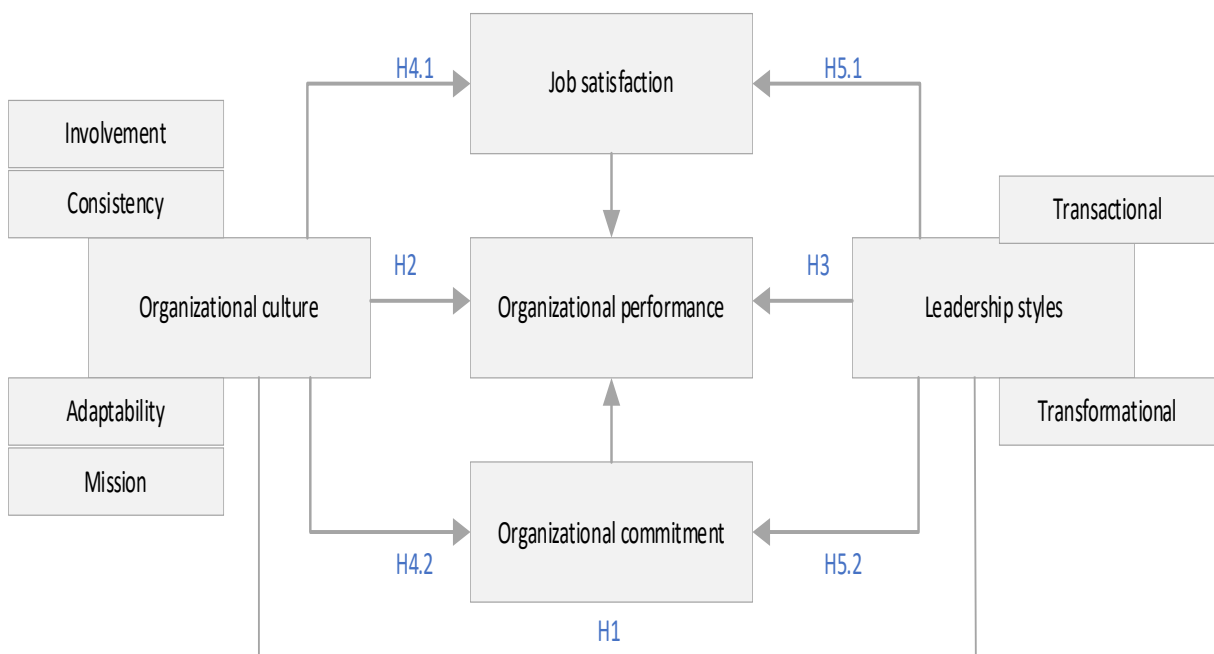


Figure 5. Research model  
Source: Author's own formation

Table 1. Summary of the research hypotheses

<b>No.</b>	<b>Hypothesis</b>
H1	There is a significant links between organizational cultural traits and leadership styles
H1-1	Transformational leadership style has a positive and significant influence on organizational culture traits
H1-2	Transactional leadership style has a significant influence on organizational culture traits
H2	There is a significant links between organizational cultural traits and organizational performance
H2-1	Involvement trait is positively related to the Effectives and negatively related to the intention to quit
H2-2	Consistency trait is positively related to the Effectives and negatively related to the intention to quit
H2-3	Mission trait is positively related to the Effectives and negatively related to the intention to quit
H2-4	Adaptability trait is positively related to the Effectives and negatively related to the intention to quit
H3	There is a significant links between the leadership styles and organizational performance
H3-1	Transformational leadership style is positively related to the Effectives and negatively related to the intention to quit
H3-2	Transactional leadership style is positively related to the Effectives and negatively related to the intention to quit
H4	Job satisfaction and organizational commitment play a significant role in explaining the relationship between organizational culture traits and organizational performance
H4-1	Job satisfaction and organizational commitment mediate the relationships between Involvement trait and organizational performance
H4-2	Job satisfaction and organizational commitment mediate the relationships between Consistency trait and organizational performance
H4-2	Job satisfaction and organizational commitment mediate the relationships between Misson trait and organizational performance
H4-3	Job satisfaction and organizational commitment mediate the relationships between Adaptability trait and organizational performance
H5	Job satisfaction and organizational commitment play a significant role in explaining the relationship between leadership styles and organizational performance
H5-1	Job satisfaction and organizational commitment mediate the relationships between Transformational leadership style and organizational performance
H5-2	Job satisfaction and organizational commitment mediate the relationships between Transactional leadership style and organizational performance

### **3. MATERIAL AND METHODS**

This chapter introduces the steps of the study design and the research method used for examining and testing the relationships among the study variables. The research context of this study will be addressed, followed by describing the research method used. The development of the research instrument and the study sample selection will be discussed. In addition, the statistical techniques used in the study will be illustrated.

#### **3.1 Research context**

The Jordanian insurance sector has been selected as a research context of the current study, due to its significant contribution in protecting all economic sectors as it is acting as a self-shield of all economic sectors. Therefore, insurance sector success and wellbeing are of great importance for all sector, especially, within unstable economy. Furthermore, ALOMARI and AZZAM (2017) reported that insurance companies' importance attributed to their responsibility of absorbing and transferring risk within the economy, providing a mechanism to encourage savings and enhance investment activities.

There are twenty-one insurance companies currently operating in Jordan, which can be classified in terms of service that provide into three categories: fourteen companies are providing non-life; life and medical insurance services and six companies are offering only general and medical insurance services. Furthermore, one foreign company is providing only medical and life insurance service (JIF, 2022).

#### **3.2 Research Sample**

To determine a sufficient sample size required to serve the aims of this study, the steps of suggested by ZIKMUND et al. (2013) were considered as a reference for selecting the sample of this study. ZIKMUND et al. (2013) suggested that researchers should consider the reason behind choosing the right sample that provide an accurate result in describing the whole population of the study. Furthermore, the validity of the sample selected should ensure that the selected is well represented of the population characteristics, and that the source of data elements were carefully selected to ensure that are truly representing a potential targeted population and are not selected from the extreme. ZIKMUND et al. (2013) steps of sampling process illustrated in Figure 6. The process starts by determining the sample population and end by conducting the field study, however, the order of sequence could defer from study to another.

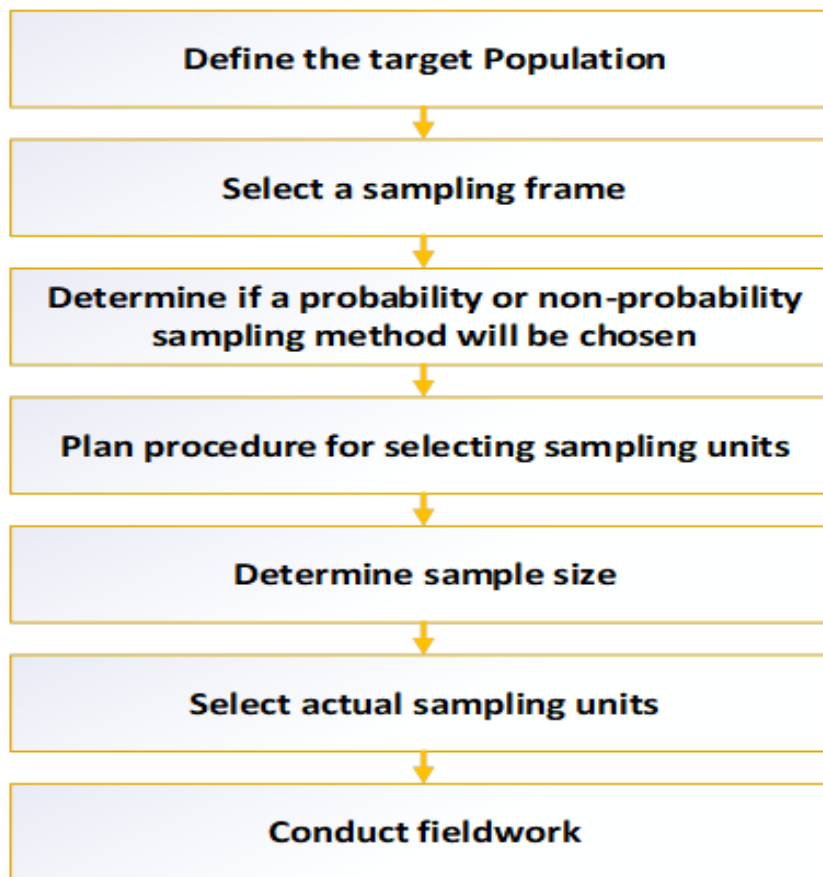


Figure 6. Research sampling process stage  
 Source : ZIKMUND et al. (2013, p. 388)

Step 1: defining the study target population will define the target object that researcher intends to study. In other words, it answers the question of what is the applicable population that serves the study purposes. The target population needs to be precisely specified at the outset of the sampling procedure to identify the appropriate sources from which data will be drawn (ZIKMUND et al., 2013). According to Jordan Insurance Federation (JIF), the number of employees in the Jordanian insurance sector reached 2,646 in 2020, with a 0.3% decrease compared to 2019 (JIF, 2022).

Stage 2: the next sage involves determining the sample frame by identifying the list of elements or units from which the sample will be picked. In the current research, as the total number of employees is not yet determined, JIF 2020 total number of employees report will be considered a target population for this study. Table 1. illustrates the Jordanian insurance companies and employee structure. Therefore, in this stage, it is important to clarify if any element in the target population need to be excluded. After surveying every company website, it has been decided to include only the front-line insurance employees and exclude the board members and top management of each company. It has been found that about 10 % of total employees fall into

this category. As shown in Table 2, the removal of this category leads to having a sample frame that includes a total of 2381 front line insurance employees at Jordanian insurance companies.

Table 2. Jordanian insurance companies and employee structure

No.	Companies	Gender		Total employee	Targeted employee
		Male	Female		
1	Jordan Insurance	159	46	205	185
2	Middle East Insurance	124	50	174	157
3	Al Manara Insurance	62	26	88	79
4	Jerusalem Insurance	81	39	120	108
5	Al-Nisr Al-Arabi Insurance	126	136	262	236
6	Jordan French Insurance	96	30	126	113
7	Delta Insurance	66	61	127	114
8	MetLife	49	30	79	71
9	Jordan International Ins. (Newton)	58	40	98	88
10	Islamic Insurance	76	26	102	92
11	Euro Arab Insurance Group	74	48	122	110
12	Arab Assurers	58	26	84	76
13	Arab Orient Insurance (gig)	259	111	370	333
14	MEDGULF Insurance	41	13	54	49
15	SOLIDARITY-First Insurance	142	45	187	168
16	National Insurance*	44	16	60	54
17	United Insurance*	53	18	71	64
18	Arabia Insurance- Jordan*	67	28	95	86
19	Arab Union International Ins.*	46	14	60	54
20	Philadelphia Insurance*	45	9	54	49
21	Arab Jordanian Ins. Group*	78	30	108	97
Total for all companies		1804	842	2646	2381

\* Excluded from the sample frame

Source: Author's own creation based on (JIF, 2022)

Stage 3: this stage requires selecting the suitable sampling method whether probability or non-probability method. In probability sampling method each units in sample frame have a non-zero probability to be chosen, while in not probability method the chance of units selection is conditional of prejudgment such as availability or convenience (ZIKMUND et al., 2013). The study employs a not probability sampling method, in which sampling elements or units will be

selected from sample frame from those are being available or reachable by the researcher. The decision of using the non-probability was supported by the fact that not all sample frame elements will be available or hard to be reachable during the time- or resource-limited data collection phase.

Stage 4: this stage entails developing a sample unit selection plan, which provides a clear and accurate framework for sample unit selection. The sampling plan will assist the researcher in determining the sample size, estimating the time required, and allocating the necessary resources by identifying procedures and methods for locating the anticipated sample (ZIKMUND et al., 2013). The sampling plan for this study is gathering information from all insurance providers with main offices in Amman, the country's capital. Afterward, each company received a formal invitation to participate in the study. Depending on the company's approval, data were collected over a period of three months using a self-administered questionnaire. The acceptance of fifteen companies was received, while six companies regretted participating. As a result, 403 elements from the sample frame were eliminated, leading to only 1978 elements targeted from fifteen insurance companies forming the sampling frame of this study.

Step 5: after finalizing the sample frame and the sampling plan, the next step is to determine the sample size. To determine the appropriate sample size, the Raosoft open-source sample size calculator was used by considering 5% as margin of error, 95% confidence interval and 50% as response distribution. Accordingly, an actual sample of 322 elements was found to be suitable sample to invited to participate in the current study. However, to improve the response rate from each company, a total of fifty questionnaires were distributed among the companies to gather data from a total of 750 element from the sample frame, which form 37% of the population frame. Besides, to get a representative sample from each company, a proportionate stratified sample technique will be employed based on the total number of employees of each company using a sampling fraction coefficient equal to 16, which mean that 16 elements from each company as minimum need to be selected.

Stage 6: after determining the sample size and the actual sample size, the next stage is to determine the sample units. Sample units represent a single element or group of elements subjected to selection from the sample frame (ZIKMUND et al., 2013). In this study, the sample units involve 750 employees from the fifteen-insurance company in Jordan, from those who were available and reachable during the data collection period. Each element will be considered as a unit of analysis.

Stage 7: once the sample units is determined, the researcher can now start the data collection process and conduct the fieldwork. Figure 7 offers a summary of the sampling process.

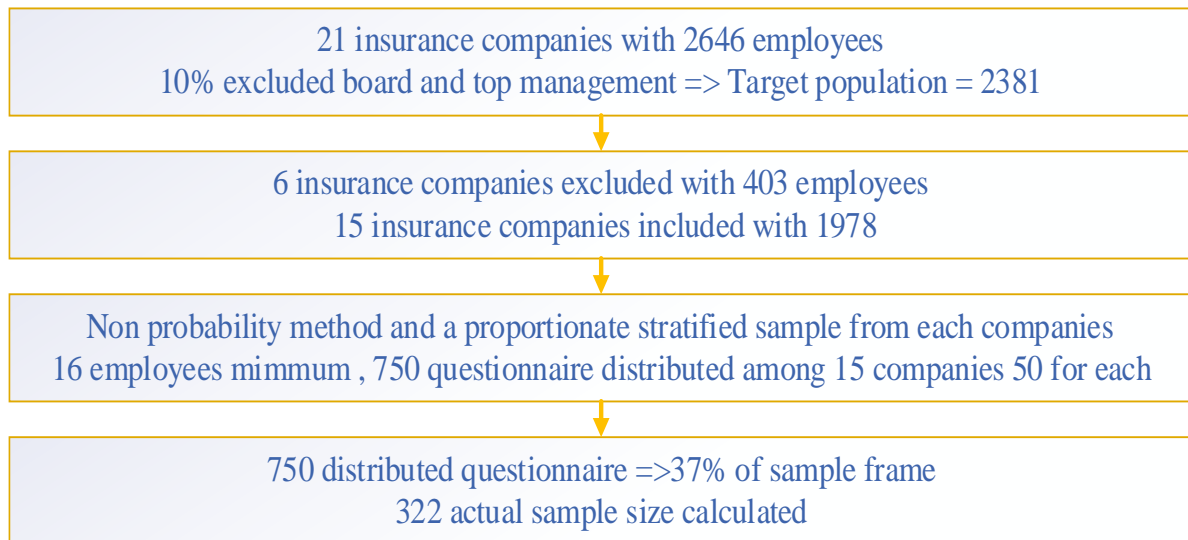


Figure 7. Sampling process summary

Source: Author's own creation

### 3.3 Research methods

There are several ways or techniques of data collection that are commonly used in management research, and it can be classified into three main categories: qualitative, quantitative, or mixed qualitative-quantitative methods. The selection of the research methods often depends on the study's aims and on how it can be achieved, in other words, on what kind of knowledge the research attempts to develop. Qualitative research methods considered as interpretative philosophy that focuses on interpretation, explanation and provides deep knowledge about the study phenomena by observing and interpreting. Thus, qualitative data relates to the form of data that is not subjected to be numerically analyzed or is so difficult to quantify (LANCASTER, 2005). Qualitative methods involve various research strategies such as action research, case study, ethnography, and grounded theory. Also, it uses expert observations, focus groups, in-depth interviews, and the analysis of archival or historical information as data collection techniques (SHAH and CORLEY, 2006).

Quantitative research methods, on the other hand, relate to the form of data that is subjected to be statically analyzed and numerically quantified. Quantitative research methods often use standardized questions or scales that either directly or indirectly measure the study phenomena. So, the quantitative data is highly structured, which can be analyzed through mathematical procedures that range from simple descriptive analysis into more complicated procedures such as hypotheses or statistical models testing (LANCASTER, 2005).

Quantitative research methods particularly associate with experimental and survey research strategies. Quantitative data regularly is gathered through questionnaires or structured interviews. By using a representative sample from the targeted population, qualitative research methods allow the researcher to determine the generalizability of the collected data about the study phenomena over the entire population.

In the current research, a mixed-methods approach will be used to accomplish the study purposes. To finalize the research hypotheses, a qualitative approach to gather data about the research variables and context will be implemented. Then, a self-administrated questionnaire will be developed based on the previous literature to collect data from the research sample. Figure 6 gives a simple snap of the research methodology.

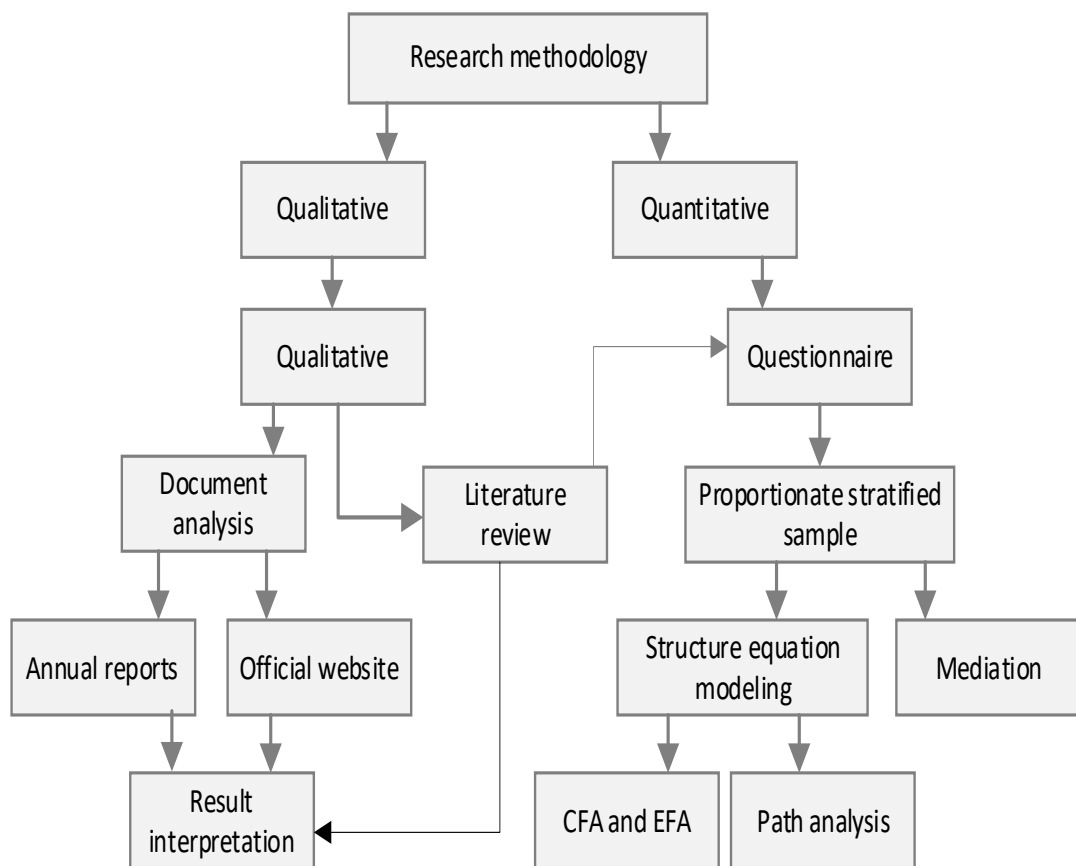


Figure 8. Research methodology  
Source: Author's own creation

### 3.4 Research instrument

Due to the scarcity of valid and reliable research measures in the Arabic language for examining the study variables, including organizational culture, leadership styles, job satisfaction, organizational commitment, and organizational performance, the current study translated widely cited and used Western-origin instruments. These instruments showed an acceptable

level of reliability and can be considered valid to serve the aims of this study. For this study, seven questionnaire tools were chosen from the literature.

The summary of these instruments is shown in Table 3. In addition to the eight instruments, other demographic questions will be added to collect demographic data about the participants and their companies. The detailed wording of all questions is available in appendix A.

Table 3. Questionnaire Components

Instrument	Numbers of items	Type of variables	Source
Organizational culture	36 items	Independent variable	
• Involvement	9 items	Independent variable	
• Consistency	9 items	Independent variable	(FEY and DENISON, 2003)
• Adaptability	9 items	Independent variable	
• Mission	9 items	Independent variable	
Leadership styles	14 items	Independent variable	
• Transformational leadership	7 items	Independent variable	(CARLESS et al., 2000), and (MACKENZIE et al., 2001)
• Transactional leadership	7 items	Independent variable	
Job satisfaction	6 items	Independent and mediator variable	(ANDREWS and WITHEY, 1976)
Organizational commitment	5 items	Independent and mediator variable	(BECKER, 1992; KLEIN et al., 2014)
Organizational performance	10 items	Dependent variable	
• Effectiveness	7 items	Dependent variable	(FEY and DENISON, 2003), and (SKELTON et al., 2019) based on (MOBLEY et al., 1978)
• Intention to quit	3 items	Dependent variable	

*Source: Author's own creation*

- *Organizational culture*

Although there are many models and instruments for measuring organizational culture, there is a lack of agreement on which ones are more appropriate or superior to the other. Hence, the short form of DOCS has been selected to serve the study purposes (FEY and DENISON, 2003). The reason behind this is that the DOCS has been employed in different contexts (DENISON et al., 2003; FEY and DENISON, 2003), and it has an acceptable construct validity and reliability. Besides, the DOCS has been developed to evaluate the relationship between organizational culture and organizational effectiveness which is part of the study aims (DENISON et al., 2014; TAN, 2019).

The short form of DOCS includes 36 items associate with four cultural traits: involvement, adaptability, consistency, and mission. Each of these traits includes three sub-indices that are themselves derived from three items each. The DOCS also offer additional items related to organizational effectiveness such as sales/revenue growth, market share, quality of goods and services, new product development, employee satisfaction, profitability/return on assets, and total organizational effectiveness.

All items used five-point Likert scale questions with responses ranging from 1= strongly disagree to 5 = strongly agree. The sum of the score of three related sub-indices then added up to obtain the score of related culture trait. The involvement trait consists of empowerment, team orientation, and capability development. The consistency trait includes core values, agreement and coordination, and integration. The sub-indices of adaptability trait are organizational learning, customer focus, and creating change. Strategic direction and intent, goals and objectives, and vision are the three sub-indices of mission trait (FEY and DENISON, 2003).

- *Leadership styles*

As mentioned before in this study, two different leadership will be measured to clarify their relationships with the other research variable. Firstly, the transformational leadership style will be measured by the global transformational leadership scale (GTL) offered by CARLESS et al. (2000). The GTL scale is a unidimensional construct measure, and it includes seven items that reflect deferent transformational leadership themes, namely articulating visions, staff development, supportive leadership, empowerment, innovative thinking, charismatic leadership, and leading by examples. The alpha coefficient has been shown very good internal consistency at 0.86 during the scale development. Yet the GTL scale has been widely used in the leadership literature, and it has been generally acknowledged as valid measures to evaluate the follower perceptions of their leaders' leadership style (BUIL et al., 2019).

Secondly, the transactional leadership style will be measured by the seven items scale that have been proposed by MACKENZIE et al. (2001). This scale is based on the work of PODSAKOFF et al. (1984) and it involves two kinds of transactional leadership behavior: the contingent reward style (CRS), and the contingent punishment style (CPS). Four items will be used to measure CRS, which is equivalent to positive supervisory feedback or positive management by expectation style, and three items will be used to measure CPS, which is equivalent to negative supervisory feedback or negative management by expectation style (MACKENZIE et al., 2001).

The CRS is related to the higher performance, so followers get reward based on their superior performance. Meanwhile, the CPS is linked to poor performance, so followers receive negative

feedback on their poor performance (BASS and AVOLIO, 1994). The alpha coefficient has been shown very good internal consistency at 0.87 and 0.79 for CRS and CPS, respectively (MACKENZIE et al., 2001), and both scales reflect unidimensional constructs and hold good psychometric properties (PODSAKOFF et al., 1984). In this study, all leadership scales will use a five-point Likert scale question with responses ranging from 1= strongly disagree to 5 = strongly agree.

- *Job satisfaction*

The study is more concerned with measuring overall job satisfaction instead of measuring different facets of job satisfaction. Therefore, the overall job satisfaction scale (OJSS) measure adopted to serve this goal. In the study ANDREWS and WITHEY (1976) job satisfaction scale was adopted to collect the data on participants' perceptions of their current job. The OJSS includes six items that load on a single factor. The OJSS has been tested through different professions. The result revealed no significant differences between males and females, and even between six major professional groups.

The study of RENTSCH and STEEL (1992) shows that the chosen scale has an adequate internal consistency at 0.81, and it can be considered a reliable and valid measure of overall job satisfaction. However, the substantial advantages of using OJSS for measuring job satisfaction are that it needs less than one minute to complete, and it has a generic nature that supports its applicability across several sectors (RENTSCH and STEEL, 1992). In this study, the OJSS used a five-point Likert scale ranging from 1= strongly dissatisfied to 5 = strongly satisfied, in which the sum of total score reflects the extent to which employees are satisfied or dissatisfied with their job.

- *Organizational commitment*

Although there are several conceptualizations and models that view commitment differently, the study adopts a unidimensional definition for the commitment offered by KLEIN et al. (2012), as it provides a unique construct definition, and it can be valid across targets. Therefore, Klein et al. Unidimensional Target-free scale (KUT) was used to measure employee's commitment toward their organizations (KLEIN et al., 2014). The KUT commitment scale includes 4 items by using a 5-point Likert scale where the responses format ranged from 1=not at all to 5= Extremely. The KUT scale showed a very high internal consistency during scale development with Cronbach alpha ranging in from 0.86 to 0.97 across array of targets (KLEIN et al., 2014), other scholars reported similar evidence for the KUT scale reliability as well (VANCE et al., 2020). Furthermore, the KUT scale showed an adequate convergent validity compared to other commitment measures or with related variables, as well as an adequate

predictive validity for commitment outcomes such as performance and turnover (KLEIN et al., 2014; VANCE et al., 2020). Beside the KUT scale, a single attachment item by BECKER (1992) were used to measure the employee commitment.

- *Organizational performance*

As discussed before, organizational performance is a complex construct, which requires to consider different aspects. Thus, this study will use deferent instrument to measure organizational performance. The DOCS include seven items related to organizational effectiveness; these items will be used as one aspect of organizational performance such as sales/revenue growth, market share, quality of goods and services, new product development, employee overall satisfaction, profitability/return on assets ROA and total organizational effectiveness (FEY and DENISON, 2003). The DOCS effectiveness scale has been tested and validated in organizational cultural-effectiveness studies (DENISON and MISHRA, 1995).

In addition to the DOCS items, the study will include extra items to measure employees' intention to quit (ItQ) as the second aspect of organizational performance. The ItQ scale was measured using the scale adopted from SKELTON et al. (2019) which were originally derived from the study of MOBLEY et al. (1978). Several studies reported an adequate internal consistency of the scale above 0.8 (SALMAN et al., 2016; SKELTON et al., 2019). Furthermore, the scale validity was confirmed by showing its correlation with actual turnover a while after participants completed the questionnaire (MOBLEY et al., 1978). A five-point Likert scale ranging from 1= strongly disagree to 5 = strongly agree was used to rate the ItQ scale items, in which the sum of total scare reflects the extent to which employees have a higher or lower intention to quit their job.

- *Demographic Data.*

Employees' demographic data were collected using questions that described their personal and organizational characteristics such as gender and age, experience and tenure, educational level, and company name to meet the sampling criteria, which stipulates that 16 responses must be obtained as a minimum threshold from each company.

### **3.5 Research instrument translation**

Given that, as mentioned previously, this study adopted an English language instrument, this point could raise challenges when using this kind of instrument in a different cultural context due to language barriers (TOMA et al., 2017). To overcome the language barriers, TOMA et al. (2017) mentioned several approaches for research instrument translation: forward translation, backward translation, and cognitive translation. In forward translation, with the help

of one or more language experts, the original instrument will be translated into the targeted language. While in backward translation, the targeted language instrument will be translated back to the original language and evaluate discrepancies and the meaning fit. Meanwhile, the cognitive approach involves the evaluation of the clarity and understanding of the translated instrument by the targeted respondents.

This study used a combined approach of translation, which included the following steps: first, the original instrument was translated from English to Arabic by one language expert. Second, another language expert translated the Arabic version back into English. Third, the translation's quality was checked and evaluated by a third language expert, who rated the translation on a scale of 1 to 10. Then, using a score threshold of  $> 8$ , any items that failed to surpass the limit were reevaluated and corrected. Finally, five native Arabic speakers reviewed and evaluated the final version's clarity and discrepancies. Minor changes were made as needed, and the revised version was adopted to be sent to the targeted respondents.

### **3.6 Statistical analysis**

In management research, researchers are often facing many challenges that can limit the types of conclusions that are drawn. Thus, researchers need to choose appropriate and rigorous research methods. That is, by considering the impact of their choices of the research instrument, data analysis, and many other issues that raise several questions about the conclusions (SCANDURA and WILLIAMS, 2000). However, the research conclusion to be valid is required to reach a certain level of reliability and validity including construct, internal, external and statistical conclusion validity (SCANDURA and WILLIAMS, 2000; TAN, 2019).

Reliability refers to the consistency of measures that are used. Construct validity is the extent to which the employed measures reflect the theoretical constructs. Internal validity reflects the existence of causality that can confirm cause and effect relationships between the investigated variables, whereas external validity determines the approximate truth of generalizing the result beyond the study sample (SCANDURA and WILLIAMS, 2000; TROCHIM, 2006). Lastly, statistical conclusion validity refers to the ability to draw conclusions based on statistical evidence of covariation as well as prediction, and concerns more with the sources of error that increase variability and the use of a suitable statistical test to handle such errors (SCANDURA and WILLIAMS, 2000).

After data cleaning and responses coding, data analysis using various statistical techniques was carried out. The descriptive analysis was employed first to describe the sample and the research variables situation at the sample companies. The descriptive analysis will explain the profile of

organizational culture in the Jordanian insurance sector, the dominant leadership styles, the level of job satisfaction and commitment, and the level of the organizational performance of the insurance sector in Jordan. Then the exploratory analysis was employed to explain the relationships among the research variables and test the study hypotheses.

In this research, the Structure Equation Modelling (SEM) technique will be adopted in trying to meet the research goals. The choice of using such technique is motivated by its ability to offer a mean to quantify specific cause and effect relationships between the observed variables through the path analysis, and its ability to evaluate whether the observed data have a good fit with the hypothetical model through analysis of the measurement models such as Exploratory factor analysis (EFA) and Confirmatory Factor Analysis (CFA) (LAM and MAGUIRE, 2012). The SEM briefly is a set of procedures that test the hypothesized relationships among the observed variables by converting the complex interactions relationships into a more structured network of directional paths that links variables then evaluating the fitness between the observed data and the hypothesized model (GRACE, 2008).

### **3.7 Data normality evaluation**

Given that most statistical tests require normally distributed data, the normality test is crucial to avoid violating statistical assumptions, as such a violation could lead to misinterpretation of the conclusion (RAZALI and WAH, 2011). According to RAZALI and WAH (2011), there are several approaches to assess the data normality, including the graphical methods by using histograms, boxplots, and Q-Q-plots, the numerical methods by evaluating the skewness and kurtosis indices of the data, and the formal normality tests by using a preprogrammed methods such as Shapiro-Wilk (SW) and Kolmogorov-Smirnov (KS) tests of normality. However, KIM (2013) reported that the result of the different ways of normality test may be inconsistent for the same sample due to the sample size, as some test might be useful with small size sample but might not useful with large . KIM (2013) argues that the numerical methods such as skewness and kurtosis values might resolve the sample size impact on the normality.

A skewness value equal to zero reflects a perfectly normally distributed variable. In other words, the data points are distributed in a symmetric distribution around the mean, as skewness is a measure of the asymmetry of the distribution of the variable. While kurtosis is a measure that describe the 'peakedness' of the distribution. Sam as skewness, a kurtosis values equal to zero reflects a perfectly normally distributed variable (KIM, 2013). The conclusion is that as much as skewness and kurtosis absolute values are close to zero, a distribution is considered normal. Although it is inconsistent among scholars about the evaluation of skewness and kurtosis values, KIM (2013), based on the work of (CURRAN et al., 1996; WEST et al., 1995),

suggested a rule of thumb for evaluation, in which an absolute value  $> 2$  and  $>7$  for skewness and kurtosis values respectively might be used as reference values for considering the variable substantially non-normality distributed.

### **3.8 Research instrument reliability and validity**

After screening the data and verifying its normality, the next step is to evaluate the construct reliability and validity of the research instrument, where reliability refers to the internal consistency of the construct items. While validity indicates how well the construct items measure what they are supposed to measure. Given that the research instruments were adopted from and used in different contexts, this step was crucial before proceeding with further analysis (ORÇAN, 2018).

As aforementioned, the research instruments consist of a total of 71 items that form the research constructs, including four organizational traits (involvement, consistency, adaptability, and mission), two leadership styles (transformational and transactional), job satisfaction, organizational commitment, effectiveness, and intention to quit. Therefore, the EFA and CFA were employed to explore the factor structures of the research construct and reduce the total number of the variables to a more meaningful and manageable variables. Besides, the EFA and CFA were used to evaluate the research instrument's validity and reliability. In addition, the result of the factorial analysis will help in evaluating the applicability of the research instrument in a non-western context, which is one of the objectives of this study.

In the factor analysis, EFA, in general, is used to extract several factors from the questionnaire items, as these factors provide a clearer picture of the research construct and serve as a proposed measurement model in the CFA. Meanwhile, CFA is employed to test the validity and fitness of the proposed measurement models with obtained data, as testing construct validity is the most commonly used CFA application. (ALAVI et al., 2020; ORÇAN, 2018).

#### *3.8.1 The EFA of research instrument*

The EFA was conducted for each of the research instruments pre-selected from literature to serve the purpose of this study. As factor analysis helps in revealing concepts embedded in research constructs by describing the underlying correlation pattern among a set of observed variables. Although the EFA is a powerful method for factors analysis or variables reduction, the EFA requires evaluating some criteria first to ensure the appropriateness of the dataset for factor analysis, including sufficient sample size, sampling adequacy test, sphericity test, commonalities evaluation, and factor loading assessment (HAIR et al., 2019). As suggested by HAIR et al. (2019), the explanation and cutoff of each criterion are summarize as follow:

- Sample size: the total number of the observed cases required to perform EFA. The cutoff suggested to be preferred  $\geq 100$ , or more  $\geq 200$  in case of expecting more factors to be extracted.
- Bartlett's test of sphericity tests the appropriateness of the dataset for factor analysis by assessing the presence of intercorrelation among the observed variables. In other words, to perform the EFA, there is a need at least to have some variables that are intercorrelated and suitable for grouping under a common factor. the statistically significant level of Bartlett's test of sphericity, (sig.  $< 0.50$ ), suggests that appropriate correlations exist among the observed variables to carry on the EFA (HAIR et al., 2019).
- Kaiser-Meyer-Olkin (KMO) test of ample adequacy evaluates the appropriateness of the dataset for factor analysis by measuring the proportion of the common variance among the observed variable, in which a lower proportion of a common variance is more the data will be fit for factor analysis, KMO values as the KMO ranged from 0 to 1, with KMO values between 0.8 to 1 are considered to reflect sampling adequacy for factor analysis. Meanwhile, values below 0.6 indicate a lack of sampling adequacy for factor analysis (ISKAMTO et al., 2020). However, for reference, Kaiser suggested using the following guidelines for interpreting the KMO values, including values below 0.50 is considered unacceptable, 0.50 or above is considered miserable, 0.60 or above is considered mediocre, 0.70 or above is considered middling, 0.80 or above is considered meritorious, and 0.90 or above is considered marvelous (ISKAMTO et al., 2020).
- Communalities reflect to which extent the variable contributes to the variance explained by the factor, as it measures the amount of the variable's variance that is shared with all other variables included in the factor analysis. The rule of thumb offered by HAIR et al. (2019) suggests that viewing communalities values of 0.4 or above are considered sufficient for retaining the items, and values below 0.4 require a larger sample size. However, communalities values of 0,6 for most variables included in factor analysis are preferred.
- The number of the extracted factors represents the stop point of the dimension reduction, there are several methods to select, including selecting factor eigenvalues greater than 1.0, examining the total variance explained by the factors, usually 60% or above, graphical examination of scree test, and choosing factors using parallel analysis (HAIR et al., 2019).
- Factor loadings values refer to the degree of the variable correlation with the extracted factor, in which a higher loading indicates a high correlation. According to the guideline suggested by HAIR et al. (2019), absolute factor loadings values of 0.3 or above are the minimum acceptable loading to retain the variable. Nevertheless, factor loadings of  $\pm 0.5$  are

considered practically significant, while loadings of 0.7 or above indicate a well-defined structure.

- Cross loadings reflect the correlation of a single variable with many factors. It's essential to consider cross-loading when interpreting the extracted factors and pick a suitable inclusion/exclusion criteria by comparing the ratio of the square root of item loading, as the ratio between 1.0 and 1.5 is considered problematic, the ratio between 1.5 and 2.0 is considered potential, and a ratio greater than 2.0 is ignorable (HAIR et al., 2019). However, HAIR et al. (2019), recommended to assess the communalities besides the ratio of the square root of item loading suggesting that variable communality greater than 0.5 is necessary for retaining the variables in the analysis.

### 3.8.2 *The CFA of research instrument*

CFA is a statistical technique used to confirm the factor structure of a set of observed variables employed to measure a particular construct. CFA allows researchers to validate the hypothesis of a relationship among observed variables with their underlying latent constructs (ORÇAN, 2018). Therefore, CFA requires a robust theoretical model to be evaluated using observed empirical data by uncovering the underlying latent construct associated with a set of observed variables. According to ORÇAN (2018), CFA only is not enough to be used when adopting or translating a predeveloped research measure, as in such case, a translation error or misleading conclusion might arise. To avoid such case, ORÇAN (2018), suggested considering the result of EFA as a guideline for the CFA, in which EFA provides more evidence about the intercorrelations between the observed variables and the generated latent factor structure.

The CFA approach involves first establishing a hypothetical model represented by a specific factor(s) embedded in an underlying set of items. Followed by determining the amount of covariance between the observed variables that could be explained by the underlying latent factor(s), and at last, evaluating the goodness of fit of the proposed model, which measures to which extent the hypothetical model fits the observed data. In this study, the extracted components from EFA were used as a fundamental model for identifying an empirically based factor to be validated by the subsequent CFA

## 4. RESULTS AND FINDINGS

This chapter presents the finding and the result of the statistical analysis, the chapter discusses the data analysis procedures, the sample demographical profiles, the instrument reliability and validity, the disruptive analysis result and the path analysis finding This chapter also highlights the important result of the analysis and the evaluation of the research hypotheses.

### 4.1 Data analysis

Before starting the data analysis, the collected data were screened for missing or incomplete questionnaires. This section presents the summary of the data cleaning and coding before the data analysis was carried out. As prementioned, 750 questionnaires were distributed among 15 companies that accepted to participate in the study. At the end of the data collection period, 385 (51.3%) questionnaires were returned and checked.

The first step was to code the collected data and enter the data into the data analysis program. The SPSS 25 was used to examine the descriptive statistics and frequency distributions. The data were coded accordingly and sorted as shown in the Table 4.

Table 4. Variables code summary

Variable name	Variable items	Variables code
Organizational culture	36 items	OC
• Involvement	9 items	Inv1 to Inv9
• Consistency	9 items	Con1 to Con9
• Adaptability	9 items	Adp1 to Adp9
• Mission	9 items	Mis1 to Mis9
Leadership styles	14 items	LS
• Transformational leadership	7 items	TFLS1 to TFLS7
• Transactional leadership	7 items	TSLS1 to TSLS7
Job satisfaction	6 items	Js1 to Js6
Organizational commitment	5 items	Ocm1 to Ocm5
Organizational performance	10 items	OP
• Effectiveness	7 items	Effs1 to Effs7
• Intention to quit	3 items	ItQ1 to ItQ3

*Source: Author's own creation*

The test of missing data revealed that 57 questionnaires had missing data in most variables and were subjected to elimination. This result led to a 43.7 % response rate, with 328 questionnaires suitable for further analysis. The next step was to check whether the data have extreme coding or out of range values. The frequency test does not show any extreme or out of range values in the data.

The next step after response coding and missing data evaluation was to check if the collected data met the sampling criteria, as the sampling criteria required having a minimum response rate from each company to be included in the further analysis, as a minimum of 16 responses from each company was necessary. Frequency analysis was performed based on the company names variable and then compared the responses rate with the total number of employees at each company. The result revealed that 15 companies satisfied the sampling criteria of having 16 responses. Table 5 offers the distribution of responses among the participating companies.

Table 5. Responses distribution

No.	Company name	Employees total number	Responses	% From total employees	% In total sample
1	Jerusalem Insurance	120	22	18%	6.7%
2	Arab Orient Insurance (gig)	370	37	10%	11.3%
3	Delta Insurance	127	20	16%	6.1%
4	SOLIDARITY-First Insurance	187	21	11%	6.45
5	Islamic Insurance	102	20	20%	6.1%
6	Al-Nisr Al-Arabi Insurance	262	28	11%	8.5%
7	Al Manara Insurance	88	21	24%	6.4%
8	MetLife	79	19	24%	5.8%
9	MEDGULF Insurance	54	18	33%	5.5%
10	Arab Assurers	84	21	25%	6.4%
11	Euro Arab Insurance Group	122	21	17%	6.4%
12	Middle East Insurance	174	21	12%	6.4%
13	Jordan International Ins. (Newton)	98	20	20%	6.1%
14	Jordan French Insurance	126	18	14%	5.5%
15	Jordan Insurance	205	21	10%	6.45
	Total	2198	328*	100.0%	100.0%

\*Sample = 15% of total employees in the insurance sector

Source: Author's own creation

## 4.2 Sample demographic profile

The sample of this study includes a total of 328 participants distributed among 15 insurance companies located in Jordan. The descriptive analysis of the demographic sample profile involves the participants' gender, age, experience, educational level, and tenure, the period that

the participant spent at the current company. The demographic sample profile revealed that 38% of the participants were female, the majority age was above 30, and almost 80% had completed the BSc level of education. Their experience level was high as most of them had more than six years of experience, and just 11% of the participants had not yet completed their first year at their current company. Table 6 summarizes the sample demographic profile.

Table 6. Sample demographic profile summary

Category	Frequency	Percentage
Gender		
• Female	125	38.1
• Male	203	61.9
Age		
• 24 or less	12	3.7
• 25-29	70	21.3
• 30-39	145	44.2
• 40-49	64	19.5
• 50-59	31	9.5
• 60 or above	6	1.8
Experience		
• less than 3	32	9.8
• 3-5	41	12.5
• 6-10	93	28.4
• 11-15	65	19.8
• 16-20	42	12.8
• 21 or more	55	16.8
Tenure		
• less than 1 year	36	11.0
• 1-3 years	74	22.6
• 4-6 years	65	19.8
• 7-10 years	60	18.3
• 11 years or above	93	28.4
Educational		
• Secondary	13	4.0
• Diploma	40	12.2
• BSc	244	74.4
• MSc	29	8.8
• PhD	2	.6
Total	328	100%

*Source: Author's own creation*

### 4.3 Instrument reliability and validity result

The univariate descriptive results showed that the absolute values of skewness and kurtosis were below 2 for all variables. Accordingly, following the rule of thumb of KIM (2013), the data distributions were normal for all variables. Appendix B presents the univariate descriptive result containing the skewness and kurtosis values. Based on the normality result, the further analysis started with the EFA analysis for the research instrument followed by the CFA analysis.

#### 4.3.1 Instrument EFA result

The SPSS 25 statistical package was used to carry out the EFA using a principal component analysis (PCA) extraction method with a suitable rotation method, in which 'Oblique Promax' rotation is sufficient when there is intercorrelation among the extracted components, as it is hard to find uncorrelated constructs in the real world, while Orthogonal Varimax rotation is adequate when uncorrelated components exist.

The main goal of performing the EFA in this study was dimension reduction to reach meaningful structures that reflect the original factors of the research instrument. To achieve this goal, the EVA used several guidelines, including sample size >300, KMO test value >0.6, Bartlett's test significant level of  $p < 0.50$ , communalities of 0.4, and factor loadings of 0.4 to retain the variable in the factor analysis. Besides, with cross-loadings, communality should be greater than 0.5 to keep the variables.

- *EFA for organizational culture measure DOCS*

The EFA was employed to explore the underlying construct of organizational culture and evaluate item loadings. DOCS was adopted to assess the organizational culture, which included 36 items developed by FEY and DENISON (2003). The DOCS consists of four cultural traits, each represented by nine items. The EFA of the organizational culture includes 36 items, in which the initial solution revealed a significant correlation among the 36 items suggesting the factorability of the DOCS. KMO test of sampling adequacy was equaled to 0.966, exceeding the frequently recommended value of 0.6, and Bartlett's test of sphericity was significant at ( $\chi^2(630, n=328) = 8816.511, p < 0.5$ ), and communalities values were > 0.5 just for two items (Adap1, Con6) values were > 0.4. However, the result support conducting the EFA.

The correlation matrix was analyzed aiming to uncover the presence of multicollinearity or redundant items. The result revealed a significant correlation among the 36 items, with a high correlation among some items. The high intercorrelation values (> 0.7 or 0.8) indicate the

presence of multicollinearity, in which multiple items measure the same dimension (JAJU and CRASK, 1999; SAMUELS, 2017). To minimize the multicollinearity, a cutoff of correlation  $> 0.7$  were used as items inclusion/exclusion criteria for the EFA analysis.

PCA extracting method was performed with Varimax rotation since many components were expected to be extracted. The initial EFA result for the organizational culture measure revealed the presence of four components with an eigenvalue greater than 1, including eigenvalues of 17.509, 2.304, 2.049, and 1.017 for the four components, respectively, which together explain 63.555 % of the total variance, as each of the first three components contributed to the total variance before rotation with 48.637%, 6.400%, and 5.692 % respectively. Meanwhile, the fourth component explained only 2.825 % of the total variance.

The evaluation of the result revealed that the involvement and consistency traits were highly correlated and reflected the same component. While mission trait items loaded only on the second component, adaptability trait items were distributed among the third and fourth components. The difficulty of interpreting the result and the high percentage of the variance explained by the first component suggest looking for a second-order solution by performing a separated EFA extracting for the first component to check for different or meaningful dimensions that could exist.

The result of the EFA for the involvement-consistency items revealed the presence of one dimension with an eigenvalue of 11.131, which explained 61.837 % of the total variance (see Appendix B). Therefore, given that involvement and consistency are associated with the internal dimension of the organizational culture, it has been decided to remove highly intercorrelation items and combine the remaining items into one component that represents the internal organizational culture traits and is marked by involvement-consistency traits (INTC). Following the previously mentioned inclusion/exclusion criteria of intercorrelation of  $> 0.7$ , it has decided to remove one of any pair items that had exceeded the limit. The correlation matrix analysis led to excluding three items from involvement trait items, including Inv4, Inv8, and Inv9, and items Con9, Con5, and Con3 from consistency trait items.

After removing the items, a new round of EFA was performed with 30 items, using a PCA extracting method with Varimax rotation. KMO test of sampling adequacy was equaled to 0.959, exceeding the frequently recommended value of 0.6, and Bartlett's test of sphericity was significant at ( $\chi^2 (435, n=328) = 6557.901, p < 0.5$ ), and communalities values were  $> 0.5$  just for four items (Adp1, Con6, Adap8, and Adp9) values were  $> 0.4$ . However, the result support conducting the EFA. Table 7 offers the result of EFA of the organizational culture measure.

Table 7. Component Matrix for the organizational culture measure

Items	Component <sup>a</sup>			Communalities	Eigenvalue <sup>b</sup>	Total variance explained % <sup>c</sup>	Reliability Cronbach's Alpha
	INCO*	Mis	Adp				
Con4	.752			.679	7.149	23.830	0.941
Inv5	.748			.647			
Inv6	.746			.706			
Con1	.713			.675			
Con8	.709			.592			
Con7	.707			.579			
Con2	.691			.677			
Inv1	.672			.569			
Inv3	.667			.677			
Inv2	.639			.527			
Inv7	.634	.421		.653			
Con6	.567			.482			
Mis2		.796		.738	6.006	20.019	0.933
Mis6		.782		.744			
Mis5		.770		.700			
Mis3		.743		.693			
Mis8		.724		.668			
Mis4		.716		.689			
Mis7		.694		.651			
Mis1		.615		.525			
Mis9	.429	.533		.564			
Adp4			.723	.590	4.836	16.121	0.875
Adp5			.716	.539			
Adp3			.711	.644			
Adp6			.680	.525			
Adp7			.636	.540			
Adp8			.608	.460			
Adp1			.594	.443			
Adp2			.580	.535			
Adp9			.513	.409			
Total variance explained %						59.970	

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization

a. 3 components extracted, b. Eigenvalue after rotation, c. variance explained % after rotation.

\*INCO is the combined culture dimension (involvement and consistency).

*Source: Author's calculation*

The result revealed the presence of three components with an eigenvalue greater than 1, including eigenvalues of 13.941, 2.184, and 1.866, for the three components, respectively,

which together explain 59.970 % of the total variance, as each of the first three components contributed to the total variance before rotation with 46.471%, 7.279%, and 6.220% respectively, in addition, the examination of the scree plot suggests retaining three components (see appendix B). Almost all item loadings were above 0.5, just for two items (Adp9 and Mis9), loadings values were above 0.4, and items communalities exceeded the cutoff of 0.5 almost for all items. Accordingly, as shown in Table 6, the result revealed that three components were extracted, and the extracted components interpretation was performed by comparing items loading with the original version of the scale components.

The first component reflects the combined internal culture traits that involve involvement and consistency traits (INCO) with an item that has cross-loading on the mission trait component, including items Inv7 “*This organization is constantly improving compared with its competitors in many dimensions*”, Con4 “*When disagreements occur, we work hard to achieve solutions that benefit both parties in the disagreement*”. The second component includes nine items associated with the mission cultural trait with an item that has cross-loading on the combined internal culture traits component, including item Mis9 “*Our vision creates excitement and motivation for our employees*”, and the third component consists of nine items associated adaptability cultural trait of the original DOSC, including item Adp2 “*This organization responds well to competitors and other changes in the business environment.*”. Cross-loading items (Inv7, Mis9) were retained, as the communalities values of both items were above 0.6, and the cross-loadings were slightly above 0.4, which can be ignorable in terms of the ratio of the square route of item loading.

- *EFA for leadership styles measure*

The EFA was employed to explore the underlying construct of leadership styles and evaluate item loadings. The leadership styles scale items were adopted from two scales, including the seven TRLS scale items developed by CARLESS et al. (2000) and the seven TSLS scale items MACKENZIE et al. (2001). The EFA of the leadership styles scale includes 14 items, in which the initial solution revealed a significant correlation among the majority items. KMO test of sampling adequacy was equaled to 0.923, exceeding the frequently recommended value of 0.6, and Bartlett’s test of sphericity was significant at ( $\chi^2$  (91, n=200) = 2019.594, p <0.5), and communalities values were > 0.5. Thus, the result support conducting the EFA.

PCA extracting method was performed with Varimax rotation since many components were expected to be extracted. The EFA result for the leadership styles measure revealed the presence of three components with an eigenvalue greater than 1, including eigenvalue of 7.302, 1.854,

1.062 for the three components, respectively, which together explain 72.989 % of the total variance, as each of the first three components contributed to the total variance before rotation with 52.160 %, 13.243%, and 7.586 %, respectively. In addition, the examination of the scree plot suggests retaining three components (see appendix B). Item loadings were above 0.6, and item communalities exceeded the cutoff of 0.5 for all items.

Accordingly, as shown in Table 8, the result revealed that three components were extracted, and the extracted components interpretation was performed by comparing items loading with the original version of the scale components. The first component reflects a pure TFLS scale with one item has cross-loading with the second component, including item TFLS5 “*My manager encourages thinking about problems in new ways and questions assumptions*”.

Table 8. Component Matrix for the leadership styles measure

Items	Component <sup>a</sup>			Communalities	Eigenvalue <sup>b</sup>	Total variance explained % <sup>c</sup>	Reliability Cronbach's Alpha
	TFLS	CRS	CPS				
TFLS1	.868			.783	5.410	38.641	0.956
TFLS4	.865			.844			
TFLS6	.852			.798			
TFLS2	.847			.809			
TFLS7	.824			.805			
TFLS3	.787			.788			
TFLS5	.776	<u>.410</u>		.774			
TSLs3		.813		.723	2.945	21.034	0.806
TSLs2		.729		.673			
TSLs1	<u>.403</u>	.697		.658			
TSLs4		.641		.526			
TSLs6			.878	.784	1.864	13.314	0.637
TSLs7			.715	.597			
TSLs5			.705	.657			
Total variance explained %						72.989	

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization

a. 1 components extracted, b. Eigenvalue after rotation, c. variance explained % after rotation.

Source: Author's calculation

The second component includes four items associated with the contingent rewards subscale (CRS) of the original TSLs scale with an item that has cross-loading with the TFLS component, including item TSLs1 “*My manager always gives me positive feedback when I perform well*”. Meanwhile, the third component consists of three items associated with the contingent punishment style (CPS) of original TSLs scale, including item TSLs5 “*My manager would indicate his or her disapproval if I performed at a low level*”. Cross-loading items were retained,

as the communalities values of both items were above 0.6, and the cross-loadings were slightly above 0.4, which can be ignorable in terms of the ratio of the square route of item loading.

- *EFA for job satisfaction measure*

The EFA was employed to confirm the unidimensional nature of the Js construct and evaluate item loadings. The EFA of the Js scale includes six items, in which the initial solution revealed a significant correlation among all items. KMO test of sampling adequacy was equaled to 0.887, exceeding the frequently recommended value of 0.6, and Bartlett’s test of sphericity was significant at ( $\chi^2$  (15, n=200) = 597.644,  $p < 0.5$ ), and communalities values were  $> 0.5$  for almost all items except item Js6 was 0.467. Thus, the result support conducting the EFA analysis.

A simple PCA extracting method was performed with no rotation since a single component was expected to be extracted. The EFA result for Js, as shown in Table 9, revealed the presence of a single component with an eigenvalue greater than 1, which explain 63.592 % of the total variance. In addition, the examination of the scree plot suggests retaining only one component (see appendix B). Item loadings were above 0.6, and item communalities exceeded the cutoff of 0.5 almost for all items. Although item Js 6 commonality was below the cutoff limit of 0,5, it has been retained as it improves the scale reliability. Accordingly, the result supports the unidimensional nature of the Js measure by keeping the six items that form the Js scale, including item Js3 “*How do you feel about the work you do on your job -- the work itself?*”.

Table 9. Component Matrix for the Js measure

Items	Component <sup>a</sup> Effs	Communalities	Eigenvalue	Total variance explained %	Reliability Cronbach's Alpha
Js5	.854	.729	3.816	63.592	0.879
Js3	.838	.702			
Js4	.832	.691			
Js1	.817	.667			
Js2	.748	.559			
Js6	.683	.467			
Total variance explained %				63.592	

Extraction Method: Principal Component Analysis without rotation.

a. 1 components extracted.

*Source: Author's calculation*

- *EFA for organizational commitment measure*

The EFA was employed to confirm the unidimensional nature of the Ocm construct and evaluate item loadings. The Ocm scale items were adopted from two scales, including the KUT

4 items scale developed by KLEIN et al. (2014) and a single attachment item by BECKER (1992). The initial solution revealed a significant correlation among all items. KMO test of sampling adequacy was equaled to 0.870, exceeding the frequently recommended value of 0.6, and Bartlett's test of sphericity was significant at ( $\chi^2$  (10, n=200) = 755.522, p <0.5), and communalities values were > 0.6 for all items. Thus, the result support conducting the EFA.

A simple PCA extracting method was performed with no rotation since a single component was expected to be extracted. The EFA result for Ocm revealed the presence of a single component with an eigenvalue greater than 1, which explain 75.407 % of the total variance. In addition, the examination of the scree plot suggests retaining only one component (see appendix B). Item loadings were above 0.7, and item communalities values exceeded the cutoff of 0.5, as shown in Table 10. Accordingly, the result supports the unidimensional nature of the Ocm measure by retaining the five items that form the Ocm scale, including item Ocm3 "*To what extent you are dedicated to your current employer*".

Table 10. Component Matrix for the Ocm measure

Items	Component <sup>a</sup> Ocm	Communalities	Eigenvalue	Total variance explained %	Reliability Cronbach's Alpha
Ocm4	.925	.856	3.770	75.407	0.917
Ocm3	.914	.835			
Ocm5	.888	.788			
Ocm2	.822	.675			
Ocm1	.785	.616			
Total variance explained %				75.407	

Extraction Method: Principal Component Analysis without rotation.

a. 1 components extracted.

*Source: Author's calculation*

- *EFA for Effectiveness measure*

The EFA was employed to confirm the unidimensional nature of the Effs construct and evaluate item loadings. The EFA of the Effs scale includes seven items, in which the initial solution revealed a significant correlation among all items. KMO test of sampling adequacy was equaled to 0.867, exceeding the frequently recommended value of 0.6, and Bartlett's test of sphericity was significant at ( $\chi^2$  (21, n=200) = 876.755, p <0.5), and communalities values were > 0.5 for all items. Thus, the result support conducting the EFA analysis.

A simple PCA extracting method was performed with no rotation since a single component was expected to be extracted. The EFA result for Effs revealed the presence of a single component

with an eigenvalue greater than 1, which explain 64.203 % of the total variance. In addition, the examination of the scree plot suggests retaining only one component (see appendix B). Item loadings were above 0.7, and item communalities values exceeded the cutoff of 0.5, as shown in Table 11. Accordingly, the result supports the unidimensional nature of the Effs measure by retaining the seven items that form the Effs scale, including item Effs1 “*how would you assess your company effectiveness in the following areas – sales growth*”.

Table 11. Component Matrix for the Effs measure

Items	Component <sup>a</sup> Effs	Communalities	Eigenvalue	Total variance explained %	Reliability Cronbach's Alpha
Effs1	.858	.736	4.494	64.203	0.906
Effs7	.817	.667			
Effs5	.808	.653			
Effs6	.804	.647			
Effs2	.784	.615			
Effs4	.768	.590			
Effs3	.766	.587			
Total variance explained %				64.203	

Extraction Method: Principal Component Analysis without rotation.

a. 1 components extracted.

Source: Author's calculation

- *Unidimensional EFA for intention to quit measure.*

For the unidimensional construct, the EFA was employed to confirm the unidimensional nature of the ItQ construct and evaluate item loadings. The EFA of the ItQ scale includes three items, in which the initial solution revealed a significant correlation among the three items. KMO test of sampling adequacy was equaled to 0.733, exceeding the frequently recommended value of 0.6, and Bartlett's test of sphericity was significant at ( $\chi^2$  (3, n=200) = 374.561670,  $p < 0.5$ ), and communalities values were  $> 0.5$  for all items. So, the result support conducting the EFA analysis.

A simple PCA extracting method was performed with no rotation since a single component was expected to be extracted. The EFA result for ItQ revealed the presence of a single component with an eigenvalue greater than 1, which explain 83.166% of the total variance. In addition, the examination of the scree plot suggests retaining only one component (see appendix B). Item loadings were above 0.8, and item communalities values exceeded the cutoff of 0.5, as shown in Table 12. Accordingly, the result supports the unidimensional nature of the ItQ measure by retaining the three items that form the ItQ scale, including item ItQ3 “*If I could choose again,*

*I would not be happy to choose to work in this company” and ItQ2 “I have plans to look for a new job during the next year”.*

Table 12. Component Matrix for the ItQ measure

Items	Component <sup>a</sup>	Communalities	Eigenvalue	Total variance explained %	Reliability Cronbach's Alpha
	ItQ				
ItQ1	.936	.876	2.495	83.166	0.897
ItQ3	.901	.811			
ItQ2	.899	.808			
Total variance explained %				83.166	

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

*Source: Author’s calculation*

#### 4.3.2 Instrument CFA result

The SPSS AMOS 24 statistical software package was used to perform the CFA to evaluate the measurement models of this research, including organizational culture, leadership, job satisfaction, organizational commitment, effectiveness, and intention to quit. However, to establish and test construct, convergent, and discriminant validity, multidimensional structural models will be tested instead of testing a unidimensional construct model. In connection to the model's goodness of fit assessment and how well they fit the observed data, the cutoff criteria offered by HU and BENTLER (1999) and WEST et al. (2012) were used. Table 13 summarizes the used criteria, in which a combination of measures will be used to provide evidence for the model's overall fit.

Table 13. model fit selection criteria

Measure	Threshold	Interpretation		
		Terrible fit	Acceptable fit	Excellent fit
CMIN/DF**	Ratio of 2:1 or 3:1	> 5	> 3	> 1
Comparative Fit Index (CFI)	(0 to 1)	<0.90	<0.95	>0.95
Standardized Root Mean squared Residual (SRMR)	> 0	>0.10	>0.08	<0.08
Root Mean Square Error of Approximation (RMSEA)	> 0	>0.08	>0.06	<0.06
Tucker-Lewis Index (TLI)	(0 to 1) *	<0.90	<0.95	>0.95

\*\* CMIN/DF: the ratio of model Chi-square minimum / model degree of freedom.

\*TLI value can be negative, negative indicates an extremely mis-specified model, and TLI value greater than 1 indicates extremely well-fitting model.

*Source: Author’s creation based on HU and BENTLER (1999) and WEST et al. (2012)*

- CFA for organizational culture measure

The hypothetical model involves three sub dimensions of organizational culture traits, including adaptability, mission, and the combined involvement-consistency (INCO) traits. The initial model includes 30 items distributed among the three factors. The initial estimate factor loadings revealed that items loaded well on their latent factors with minimum loading of 0.574. regarding the model goodness of fit indices, the initial estimate showed that the three-factors model (INCO, Mis, and Adp) Chi-square value is = 882.215 (n=328, P<0.01) with 402 degrees of freedom leading to CMIN/DF = 2.195, RMSEA was = 0.06, SRMR was = 0.052, CFI was = 0.924, and TLI was = 0.918.

Accordingly, the initial estimate of the model showed an excellent model fit in connection to the RMSEA, the CMIN/DF and the SRMR measures, as the values below the threshold of <0,6, <0.3, and <0.6 respectively. Even though CF1 and NTI fit measures showed an acceptable model fit, item loadings were satisfactory. However, a statistical remedy was applied to improve the model goodness of fit using covariance modification indices (MI) (YAŞLIOĞLU and YAŞLIOĞLU, 2020) . The statistical remedy entitles considering a covariance among items error terms within the same factors. Given that indicators within the same construct are correlated, it might be helpful to consider a correlation between the error terms too, when it is justifiable and reasonable in explaining the variance within the construct (BRYANT et al., 1999; YAŞLIOĞLU and YAŞLIOĞLU, 2020).

The analysis of modification indices showed a covariance among error terms of three pairs of items, including adp4 – Adp5, Mis7 – Mis9, and Adp7-Adp8 with MI = 49.452, 27.162, and 27.018, respectively (see appendix B). After examining the items' wording, it has been decided to consider a correlation among the error terms assuming that the items were nearly similar. After considering the covariance among the error terms, the final model showed that the CMIN/DF and the RMSEA values were improved, along with the other model's goodness of fit measures. The final model showed a satisfactory model fit, which supports the inclusion of the three constructs in the subsequent analysis.

The result of the CFA revealed that two constructs, including INCO and Mis, reflected adequate reliability and validity, in which the values of the Average variance extraction (AVE), the composite reliability (CR), and the internal consistency coefficient (Alpha) were satisfactory. The CR and Cronbach's Alpha values were >0.7, which indicates adequate internal consistency and reliability for INCO and Mis cultural traits. Table 14 presents the finding of organizational culture CFA result.

Table 14. CFA summary of Organizational culture model

Factor name	Items	Factor loadings <sup>a</sup>		AVE <sup>b</sup>	CR <sup>c</sup>	Cronbach's Alpha <sup>d</sup>
		Initial	Final			
Involvement-consistency INCO	Inv5	0.767	0.767	0.571	0.941	0.941
	Inv6	0.822	0.764			
	Con1	0.810	0.653			
	Con8	0.728	0.691			
	Con7	0.709	0.665			
	Con2	0.815	0.591			
	Inv1	0.731	0.814			
	Inv3	0.701	0.642			
	Inv2	0.699	0.653			
	Inv7	0.796	0.548			
	Con6	0.670	0.670			
Con4	0.801	0.801				
Mission Mis	Mis2	0.827	0.830	0.611	0.934	0.933
	Mis6	0.837	0.840			
	Mis5	0.802	0.804			
	Mis3	0.811	0.815			
	Mis8	0.800	0.798			
	Mis4	0.812	0.817			
	Mis7	0.779	0.764			
	Mis1	0.652	0.653			
	Mis9	0.711	0.691			
Adaptability Adp	Adp4	0.694	0.665	0.431	0.871	0.875
	Adp5	0.631	0.591			
	Adp3	0.804	0.814			
	Adp6	0.653	0.642			
	Adp7	0.672	0.653			
	Adp8	0.574	0.548			
	Adp1	0.600	0.603			
	Adp2	0.734	0.752			
	Adp9	0.596	0.598			
Fit measure	Model	CMIN/DF	RMSEA	SRMR	TLI	CFI
	Initial	2.195	0.06	0.053	0.918	0.924
	Final	1.941	0.054	0.050	0.936	0.941

a-All items loading >0.5 indicates indicators reliability (HULLAND, 1999)

b-All AVE values are > 0.5 for all factors indicate an acceptable convergent reliability (BAGOZZI and YI, 1988)

c-All composite reliability (Cr) > 0.7 indicate an acceptable internal consistency (HAIR et al., 2011)

d-All Cronbach's Alpha are > 0.7 indicate an acceptable level of reliability (URSACHI et al., 2015)

Source: Author's calculation

In the same line, the AVE values for both constructs were  $>0.5$ , which suggests an acceptable convergent validity. Besides, although the AVE value of the Adp cultural trait was  $<0.5$ , the construct is considered reliable, as the CR and Cronbach's Alpha values have exceeded the cutoff of 0.7. Given that, according to the argument of MALHOTRA and DASH (2016), the AVE is a strict measure, the scale reliability thus might be established based on the CR and the Alpha coefficient.

Furthermore, the discriminant validity of the three constructs was checked via Heterotrait - Monotrait (HTMT) approach. The HTMT, as described by HENSELER et al. (2015), is a ratio that measures the similarity between the latent variable or construct, if the HTMT ratio is  $< 0.85$  or  $< 0.9$ . It suggests that a discriminant validity can be established. The finding of HTMT, as shown in Table 15, did not reveal any critical issues in the model, which suggest establishing a discriminant validity between the three constructs.

*Table 15. Correlations and HTMT test for organizational culture model*

<b>Construct</b>	<b>1</b>	<b>2</b>	<b>3</b>
1 Involvement- consistency (INCO)		0.774***	0.718***
2 Mission (Mis)	0.782		0.651***
3 Adaptability (Adp)	0.705	0.669	

Significance of Correlations: \*  $p < 0.050$  \*\*  $p < 0.010$  \*\*\*  $p < 0.001$

*Source: Author's calculation*

Overall, the CFA finding revealed that the organizational culture model of three subdimension reflects an acceptable model fit, and the scales can be considered reliable and valid to measure what they were intended to measure. Therefore, involving the three scales in subsequence analysis is deemed reasonable.

- CFA for organizational leadership styles and effectiveness

The hypothetical model involves three sub dimensions of leaderships along with the effectiveness measure, including TFLS, TSLS\_CR, TSLS\_CP and Effs. The initial model includes 21 items distributed among the four factors. The initial estimate factor loadings revealed that items loaded well on their latent factors with minimum loading of 0.406. regarding the model goodness of fit indices, the initial estimate showed that the four -factors model (TFLS, TSLS\_CR, TSLS\_CP and Effs) Chi-square value is = 650.060 (n=328,  $P < 0.01$ ) with 183 degrees of freedom leading to CMIN/DF = 3.552, RMSEA was = 0.088, SRMR was = 0.101, CFI was = 0.905, and TLI was = 0.892. Accordingly, the initial estimate of the model showed an unsatisfactory model fit in connection to the RMSEA, and SRMR, as the values

were below the threshold of  $<0,6$ , and for TLI measures value was below the threshold of  $0,9$ . Even though CMIN/DF and CFI measures showed an acceptable model fit, the overall model fit was unacceptable. Therefore, a statistical remedy was applied to improve the model's goodness of fit.

The first remedy was done by evaluating the items loading, in which low item loading can be considered a cause for item removal. The initial factor loading of the TSLS\_CP items showed that TSLS5 item loading was below  $0,5$ , and the item can be dropped from the scale if the removal could improve the model fit or the AVE of the scale. However, given that the TSLS\_CP includes only three items, it had been decided to apply a different statistical remedy and postpone the item removal decision.

Covariance modification indices (MI) was considered as another statistical remedy that can improve the model goodness of fit (YAŞLIOĞLU and YAŞLIOĞLU, 2020). The MI remedy entitles considering a covariance among items error terms within the same factors. The analysis of modification indices showed a covariance among error terms of three pairs of items, including Effs2 - Effs3, Effs6 - Effs7 and Effs1 - Effs2 with  $MI = 85.925, 66.774, \text{ and } 27.036$ , respectively (see appendix B).

After examining the items' wording, it has been decided to consider a correlation among the error terms assuming that the items were nearly similar or consequences of each other. The profitability is derived by the increase of the market share, and the product quality is resulting from new way of innovation. Therefore, consider a correlation between the error terms was justifiable and reasonable in explaining the variance within the construct (BRYANT et al., 1999; YAŞLIOĞLU and YAŞLIOĞLU, 2020). After considering the covariance among the error terms, the estimated model showed that the CMIN/DF, and the RMSEA values were little bit improved, along with the other model's goodness of fit measures as shown in Table 16. Overall, the model showed an acceptable model fit, which supports the inclusion of the three constructs in the subsequent analysis.

The result of the CFA revealed that three constructs, including TFLS, Effs, and TSLS\_CR, reflected adequate reliability and validity, in which the values of the Average variance extraction (AVE), the composite reliability (CR), and the internal consistency coefficient (Alpha) were satisfactory. The CR and Cronbach's Alpha values were  $>0,7$ , which indicates adequate internal consistency and reliability. In the same line, the AVE values for both constructs were  $>0,5$ , which suggests an acceptable convergent validity among TFLS, Effs, and TSLS\_CR.

Table 16. CFA summary of leadership styles and effectiveness model

Factor name	Items	Factor loadings <sup>a</sup>		AVE <sup>b</sup>	CR <sup>c</sup>	Cronbach's Alpha <sup>d</sup>
		Initial	Final			
Transformational leadership styles (TFLS)	TFLS2	0.858	0.858	0.762	0.957	0.956
	TFLS4	0.904	0.912			
	TFLS1	0.835	0.619			
	TFLS6	0.883	0.407			
	TFLS7	0.884	0.000			
	TFLS5	0.887	0.000			
	TFLS3	0.858	0.000			
Effectiveness (Effs)	Effs1	0.832	0.000	0.568	0.901	0.906
	Effs3	0.752	0.000			
	Effs2	0.69	0.000			
	Effs6	0.779	0.744			
	Effs5	0.785	0.807			
	Effs7	0.808	0.780			
	Effs4	0.724	0.754			
Transactional leadership style contingent rewords TSLs_CR	TSLs3	0.563	0.563	0.524	0.811	0.806
	TSLs2	0.804	0.804			
	TSLs1	0.835	0.835			
	TSLs4	0.661	0.660			
Transactional leadership style contingent rewords TSLs_CP	TSLs6	0.905	0.912	0.460	0.699	0.637
	TSLs7	0.624	0.619			
	TSLs5	0.408	0.407			
<b>Fit measure</b>	<b>model</b>	<b>CMIN/DF</b>	<b>RMSEA</b>	<b>SRMR</b>	<b>CFI</b>	<b>TLI</b>
	Initial	3.552	0.088	0.101	0.905	0.892
	Final	2.616	0.070	0.097	0.941	0.931

a-All items loading >0.5 indicate indicators reliability (HULLAND, 1999)

b-All AVE values are > 0.5 for all factors indicate an acceptable convergent reliability (BAGOZZI and YI, 1988)

c-All composite reliability (Cr) > 0.7 indicate an acceptable internal consistency (HAIR et al., 2011)

d-All Cronbach's Alpha are > 0.7 indicate an acceptable level of reliability (URSACHI et al., 2015)

Source: Author's calculation

Although the AVE value of the TSLs\_CP was <0.5, the construct is considered reliable, as the CR and Cronbach's Alpha values have exceeded the cutoff of 0.7. The decision was supported by the argument of MALHOTRA and DASH (2016), in which the scale reliability might be established based on the CR and the Alpha coefficient, as the AVE is considered a strict measure. Additionally, the discriminant validity of the four constructs was checked via

Heterotrait -Monotrait (HTMT) approach. The HTMT result suggests that discriminant validity can be assumed. The finding of HTMT, as shown in Table 17, did not reveal any critical issues in the model, suggesting that the discriminant validity among the four constructs can be established.

*Table 17. Correlations and HTMT test for leadership and effectiveness model*

<b>Construct</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1 TSLs		0.499***	0.799***	0.212***
2 Effs	0.484		0.457***	-0.089
3 TSLs_CP	0.807	0.484		<b>0.159*</b>
4 TSLs_CP	0.187	0.153	0.044	

Significance of Correlations: \* p < 0.050 \*\* p < 0.010 \*\*\* p < 0.001

*Source: Author's calculation*

In general, the CFA results revealed that the model of leadership styles and effectiveness model has an acceptable model fit, and the scales can be considered reliable and valid for measuring what they were designed to measure. As a result, adding the three scales into subsequence analysis is deemed appropriate.

- CFA for job satisfaction, commitment, and intention to quit measurement model.

The hypothetical model involves three measures of the employees' performance indicators, including job satisfaction, organizational commitment, and employee intention to quit. The initial model includes 14 items distributed among the three factors. The initial estimate factor loadings revealed that items loaded well on their latent factors with minimum loading of 0.617. regarding the model goodness of fit indices, the initial estimate showed that the three-factors model (Js, Ocm, and ItQ) Chi-square value is = 259.309 (n=328, P<0.01) with 74 degrees of freedom leading to CMIN/DF = 3.504, RMSEA was = 0.088, SRMR was = 0.053, CFI was = 0.947, and TLI was = 0.935.

Accordingly, the initial estimate of the model showed a poor fit in connection to the RMSEA and the CMIN/DF measures, as the values exceeded the threshold of >0,8 and >0.3, respectively. Given that all item loading was satisfactory, a statistical remedy was applied to improve the model goodness of fit using covariance modification indices (MI) as suggested by YAŞLIOĞLU and YAŞLIOĞLU (2020). The statistical remedy entitles considering a covariance among items error terms within the same factors. Given that indicators within the same construct are correlated, it might be helpful to consider a correlation between the error terms too, when it is justifiable and reasonable in explaining the variance within the construct (BRYANT et al., 1999; YAŞLIOĞLU and YAŞLIOĞLU, 2020).

The analysis of modification indices showed a covariance among error terms of two pairs of items, including Ocm4 - Ocm5 and Ocm5 - Ocm2, with MI = 27.423 and 24.035, respectively (see appendix B). After examining the items' wording, it has been decided to consider a correlation among the error terms assuming that the items were nearly similar. After considering the covariance among the error terms, the final model showed that the CMIN/DF and the RMSEA values were improved, along with the other model's goodness of fit measures. The final model showed an acceptable model fit, which supports the inclusion of the three constructs in the subsequent analysis. The CFA result of the three constructs model is shown in Table 18.

Table 18. CFA summary of Js, Ocm, and ItQ

Factor name	Items	Factor loadings <sup>a</sup>		AVE <sup>b</sup>	CR <sup>c</sup>	Cronbach's Alpha <sup>d</sup>
		Initial	Final			
Organizational commitment	Ocm4	0.911	0.881	0.717	0.926	0.924
	Ocm3	0.914	0.925			
	Ocm2	0.829	0.856			
	Ocm5	0.865	0.843			
	Ocm1	0.704	0.713			
Job satisfaction	Js4	0.797	0.798	0.584	0.893	0.888
	Js5	0.821	0.822			
	Js6	0.617	0.618			
	Js3	0.816	0.814			
	Js2	0.729	0.727			
	Js1	0.785	0.784			
Intention to quit	ItQ1	0.935	0.936	0.762	0.905	0.901
	ItQ2	0.821	0.820			
	ItQ3	0.859	0.859			
Fit measure	model	CMIN/DF	RMSEA	SRMR	CFI	TLI
	Initial	3.504	0.088	0.053	0.947	0.935
	Final	2.87	0.076	0.052	0.961	0.951

a-All items loading >0.5 indicate indicators reliability (HULLAND, 1999)

b-All AVE values are > 0.5 for all factors indicate an acceptable convergent reliability (BAGOZZI and YI, 1988)

c-All composite reliability (Cr) > 0.7 indicate an acceptable internal consistency (HAIR et al., 2011)

d-All Cronbach's Alpha are > 0.7 indicate an acceptable level of reliability (URSACHI et al., 2015)

Source: Author's calculation

The result of the CFA revealed that the three construct reflects an adequate reliability and validity, in which the values of Average variance extraction (AVE), composite reliability (CR) and the internal consistency coefficient Cronbach's Alpha were satisfactory. As the CR and Cronbach's alpha values were >0.7, which shows an adequate internal consistency and reliability.

In the same line, the AVE values for all constructs were >0.5, which indicates an acceptable convergent validity. Furthermore, the discriminant validity of the three constructs was checked via Heterotrait -Monotrait (HTMT) approach. The HTMT result suggests that a discriminant validity can be established. The finding of HTMT, as shown in Table 19, did not reveal any critical issues in the model, which suggests establishing a discriminant validity between the three constructs.

Table 19. Correlations and HTMT test for Js, Ocm, and ItQ model

<b>Construct</b>	<b>1</b>	<b>2</b>	<b>3</b>
1 Organizational commitment (Ocm)		0.771***	-0.548***
2 Job satisfaction (Js)	0.782		-0.594***
3 Intention to quit (ItQ)	0.566	0.609	

Significance of Correlations: \* p < 0.050 \*\* p < 0.010 \*\*\* p < 0.001

Source: Author's calculation

In general, the CFA results revealed that the three-factor model of Js, Ocm, and ItQ has an acceptable model fit, and the scales can be considered reliable and valid for measuring what they were designed to measure. As a result, adding the three scales into subsequence analysis is deemed appropriate.

Overall, the three CFA measurement models reliability and validity were evaluated, in which the CFA confirmed that the measurements used in the study showed an acceptable level of reliability or internal consistency. Almost for all constructs, including the INCO, Mis, Adp, TFLS, TSLS\_CR, Js, Ocm, Effs, and ItQ, the reliability coefficient Alpha was satisfactory and exceeded the cutoff of >0,7, except for the TSLS\_CP subscale of leadership, which was .637. However, Alpha values greater than 0.5 are also acceptable. Furthermore, the construct validity was reflected well, in which the AVE, the CR, the HTMT ratio, and the constructs correlation matrix suggest that the ten constructs are considered valid to measure what they are supposed to measure. Accordingly, the scale score can be calculated and used into the subsequence analysis. Table 20 presents the summary of scales reliability and validity indexes, as well as the total number of items included in each scale.

Table 20. Reliability and validity statistics table (n=328)

No.	Scale	No. of item	AVE <sup>a</sup>	CR <sup>b</sup>	Cronbach's Alpha <sup>d</sup>
1	Involvement- consistency (INCO)	12	0.571	0.941	0.941
2	Mission (Mis)	9	0.611	0.934	0.933
3	Adaptability (Adp)	9	0.431	0.871	0.875
4	Transformational leadership (TFLS)	7	0.762	0.957	0.956
5	Transactional contingent rewards (TSLC_CR)	4	0.524	0.811	0.806
6	Transactional contingent punishment (TSLC_CP)	3	0.460	0.699	0.637
7	Job satisfaction (Js)	6	0.584	0.893	0.888
8	Organizational commitment (Ocm)	5	0.717	0.926	0.924
9	Effectiveness (Effs)	7	0.568	0.901	0.906
10	Intention to Quit {ItQ}	3	0.762	0.905	0.901

Source: Author's calculation

#### 4.4 Research measures descriptive result

The aggregate score of the research measure will be examined in this section. The descriptive analysis entails calculating the mean (M) and standard deviation (SD) and conducting a correlation analysis between the research variables. After calculating the total score of the variables, the mean, standard deviation, and Person correlation were computed. Table 21 displays the aggregate score's descriptive statistics.

Table 21. Scales total score's descriptive statistics (n=328)

Variable code	Min	Max	Mean	SD	Skewness	Kurtosis
INCO	1.00	5.00	3.576	0.804	-0.792	0.606
Mis	1.00	5.00	3.558	0.852	-0.301	-0.497
Adp	1.89	5.00	3.813	0.625	-0.435	0.268
TFLS	1.00	5.00	3.665	0.989	-0.674	-0.015
TSLC_CR	1.25	5.00	3.661	0.808	-0.405	-0.326
TSLC_CP	1.00	5.00	3.134	0.872	0.163	-0.419
Js	1.00	5.00	3.637	0.896	-0.693	0.407
Ocm	1.00	5.00	4.102	0.856	-1.299	1.742
Effs	1.00	5.00	3.579	0.732	-0.673	0.920
ItQ	1.00	5.00	2.232	1.113	0.595	-0.536

Source: Author's calculation

The means and standard deviation of the organizational cultural traits were, including INCO (M=3.576, SD = 0.804), Mis (M=3.558, SD = 0.852), and Adp (M=3.813, SD = 0.625). The result suggested that the insurance employees perceived adaptability as the prevalent cultural trait used in their organization. The internal culture combined involvement-consistency (INCO) dimension was ranked second, while the Mission trait was ranked last. However, the mean of the three cultural traits was higher than the item score average, indicating that the insurance companies' organizational cultures were quite good.

The means and standard deviation of the leadership styles were, including the TFLS (M=3.665, SD = 0.989), TSLS\_CR (M=3.661, SD = 0.808), and TSLS\_CP (M=3.134, SD = 0.872). The result suggested that the insurance employees perceived TFLS as the dominant leadership style in their organization. The TSLS\_CR came in the second rank while the TSLS\_CP less frequently occurred. However, the TFLS and the TSLS\_CR reflect the supporting, stimulating, and motivating leadership behavior, indicating that insurance company leaders prefer friendly and supportive leadership behaviors over fear and punishment leadership behaviors.

Employee performance indicators, including Js and Ocm, had means and standard deviations of (M=3.637, SD = 0.896) and (M=4.102, SD = 0.856), respectively. According to the findings, the insurance employees perceived themselves to have a good satisfaction level and were highly committed to their companies. The mean of both indicators was higher than the item score average, indicating that the insurance companies appear to have a pleasant and appealing work environment.

Furthermore, the means and standard deviations of organizational performance measures, including Effs and ItQ, were (M=3.579, SD = 0.732) and (M=2.232, SD = 1.113), respectively. The findings indicate that the employees of the insurance companies perceived their organization to be performing well, as the effectiveness mean was quite good and above the item score average. Besides, the lower mean of ItQ (M=2.232, SD = 1.113) indicates that insurance companies' situation is stable regarding employee turnover.

The result of Skewness and Kurtosis indices revealed that the data distribution was normal, as absolute values were <2. Given that the normality of the data is necessary for further statistical analysis, the aggregated construct scores data need to be investigated. A graphical demonstration of the mean and standard deviation analysis is shown in Figure 9.

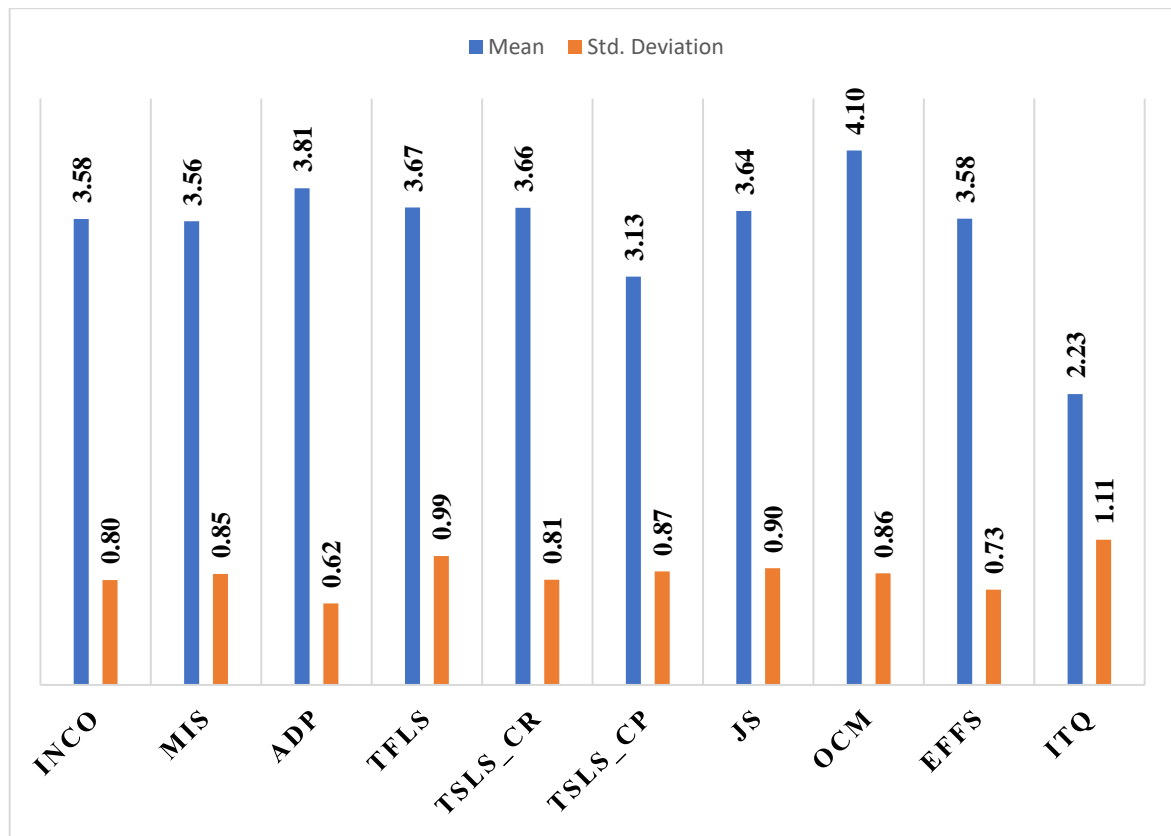


Figure 9. Mean and standard deviation  
 Source: Author's own construction

The Person correlation was calculated to determine the relationship between the research variables. Person correlation coefficient ( $r$ ) values ranged between -1 and + 1. The (+) sign represents a positive correlation, while the (-) sign represents a negative correlation. The strength of the association increases as the  $r$  value approaches one and decreases as the  $r$  value approaches zero. However, as suggested by SCHOBBER et al. (2018),  $r$  values of .10 to .39 indicate a weak correlation, values of .40 to .69 indicate a moderate correlation, and values of .70 to .90 indicate a strong correlation. The result of the Person correlation is illustrated in Table 22

Table 22. Mean, SD, and correlation matrix (n=328)

No.	variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1	Involvement- consistency (INCO)	3.576	0.804	1									
2	Mission (Mis)	3.558	0.852	.734**	1								
3	Adaptability (Adp)	3.813	0.625	.638**	.603**	1							
4	Transformational leadership (TFLS)	3.665	0.989	.645**	.529**	.360**	1						
5	Transactional contingent rewards (TSLC_CR)	3.661	0.808	.514**	.465**	.436**	.708**	1					
6	Transactional contingent punishment (TSLC_CP)	3.134	0.872	-.101	-.168**	-.193**	.128*	.011	1				
7	Job satisfaction (Js)	3.637	0.896	.637**	.546**	.456**	.620**	.481**	-.027	1			
8	Organizational commitment (Ocm)	4.102	0.856	.567**	.535**	.376**	.508**	.415**	-.023	.705**	1		
9	Effectiveness (Effs)	3.579	0.732	.622**	.605**	.509**	.451**	.414**	-.131*	.631**	.623**	1	
10	Intention to Quit {ItQ}	2.232	1.113	-.414**	-.369**	-.398**	-.414**	-.369**	.092	-.547**	-.517**	-.502**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed), \* . Correlation is significant at the 0.05 level (2-tailed).

Source: Author's calculation

The correlation analysis shows that the INCO culture trait has a moderately significant positive association with the leadership styles, including TFLS ( $r= 0.645, p < .01$ ) and TSLS\_CR ( $r= 0.514, p < .01$ ). Likewise, there is a moderate and significant positive association between INCO with Js ( $r= 0.637, p < .01$ ), OCM ( $r= 0.567, p < .01$ ), and Effs ( $r= 0.622, p < .01$ ). Whereas INCO has a moderately significant negative association with ItQ ( $r= -0.414, p < .01$ ), it has a weak positive but insignificant association with TSLS\_CP ( $r= -0.101, p < .01$ ).

The Mis culture trait has a moderately significant positive association with the leadership styles, including TFLS ( $r= 0.529, p < .01$ ) and TSLS\_CR ( $r= 0.465, p < .01$ ). Similarly, there is a moderate and significant positive association with Js ( $r= 0.546, p < .01$ ), OCM ( $r= 0.535, p < .01$ ), and Effs ( $r= 0.605, p < .01$ ). Whereas Mis has a weakly significant negative association with ItQ ( $r= -0.369, p < .01$ ), it has a weak and significant negative association with TSLS\_CP ( $r= -0.168, p < .01$ ). Furthermore, the Adp culture trait has a moderately significant positive association with TSLS\_CR ( $r= 0.436, p < .01$ ), Js ( $r= 0.456, p < .01$ ), and Effs ( $r= 0.509, p < .01$ ). Besides, there is a weak and significant positive association with TFLS ( $r= 0.360, p < .01$ ) and OCM ( $r= 0.376, p < .01$ ), Whereas Adp has a weakly and significant negative association with ItQ ( $r= -0.398, p < .001$ ), it has a weak and significant negative association with TSLS\_CP ( $r= -0.193, p < .001$ ).

The findings revealed that a moderately significant positive association exists between the Js and leadership styles, including TFLS ( $r= 0.620, p < .01$ ) and TSLS\_CR ( $r= 0.481, p < .01$ ). Besides, Js has a strongly positive significant association with Ocm ( $r= 0.705, p < .01$ ) and a moderately positive significant association with Effs ( $r= 0.631, p < .01$ ). Whereas Js has a moderately significant negative association with ItQ ( $r= -0.547, p < .01$ ), no association exists between Js and TSLS\_CP. Moreover, Ocm has a moderately significant positive association with the leadership styles, including TFLS ( $r= 0.508, p < .01$ ) and TSLS\_CR ( $r= 0.415, p < .01$ ), but no association exists with TSLS\_CP. Whereas Ocm has a moderate and significant negative association with Effs ( $r= -0.623, p < .01$ ), it has a moderate significant negative association with ItQ ( $r= -0.517, p < .01$ ).

The result shows that Effs has a moderately significant positive association with leadership styles, including TFLS ( $r= 0.451, p < .01$ ) and TSLS\_CR ( $r= 0.414, p < .01$ ). Whereas Effs has a moderately significant negative association with ItQ ( $r= -0.502, p < .01$ ), it has a weakly negative significant association with TSLS\_CP ( $r= -0.131, p < .05$ ). Additionally, ItQ has a moderate and positive significant association with TFLS ( $r= -0.414, p < .05$ ) and a weakly positive significant association with TSLS\_CR ( $r= -0.369, p < .05$ ), but no association exists between ItQ and TSLS\_CP.

## 4.5 Path analysis and hypotheses testing result

Path analysis is employed to discover the relationships between the research variables and to test the previously established hypotheses. The subsequent path models were examined to explain the relationships between 1) organizational culture traits (INCO, Mis, and Adp) and leadership styles (TFLS and TSLS), 2) organizational culture traits (INCO, Mis, and Adp) and organizational performance (Effs and ItQ), 3) leadership styles (TFLS and TSLS) and organizational performance (Effs and ItQ), 4) the role of job satisfaction (Js) and organizational commitment (Ocm) in mediating the relationship between organizational culture (INCO, Mis, and Adp) and organizational performance (Effs and ItQ), 5) the role of job satisfaction (Js) and organizational commitment (Ocm) in mediating the relationship between leadership styles (TFLS and TSLS) and organizational performance (Effs and ItQ).

### 4.5.1 Organizational culture and leadership styles models

The first hypothesis (H1), which claimed that there is a significant link between organizational cultural traits and leadership styles, was tested through path model analysis. Because of the strong correlation between TFLS and TSLS\_CR ( $r = 0.708$ ) and to avoid the multicollinearity effects, separated path models were tested, in which model 1 investigates whether the transformational leadership style (TFLS) statistically significantly predicted INCO, Mis, and Adp cultural traits meanwhile model 2 investigates whether the transactional leadership style sub dimensions, TSLS\_CR and TSLS\_CP, statistically significantly predicted INCO, Mis, and Adp cultural traits. Accordingly, two sub hypotheses were drawn, including H1-1 for model 1 and H1-2 for model 2.

- Model 1 - TFLS and organizational culture traits

Model 1 explains the path model of the TFLS relationships with the INCO, Mis, and Adp culture traits, as shown in Figure 10. Given the dynamic nature of organizational culture, employees' experience and tenure were used as control variables for the endogenous variables to improve the model fit. Besides, the covariance among the cultural traits was considered, as they are strongly correlated. The model shows an excellent model fit, as fit measure indices were met. The total variance explained also was statistically significant with  $R^2$  values for INCO ( $R^2 = 0.44$ ,  $p < .001$ ), Mis ( $R^2 = 0.30$ ,  $p < .001$ ), and Adp ( $R^2 = 0.16$ ,  $p < .001$ ).

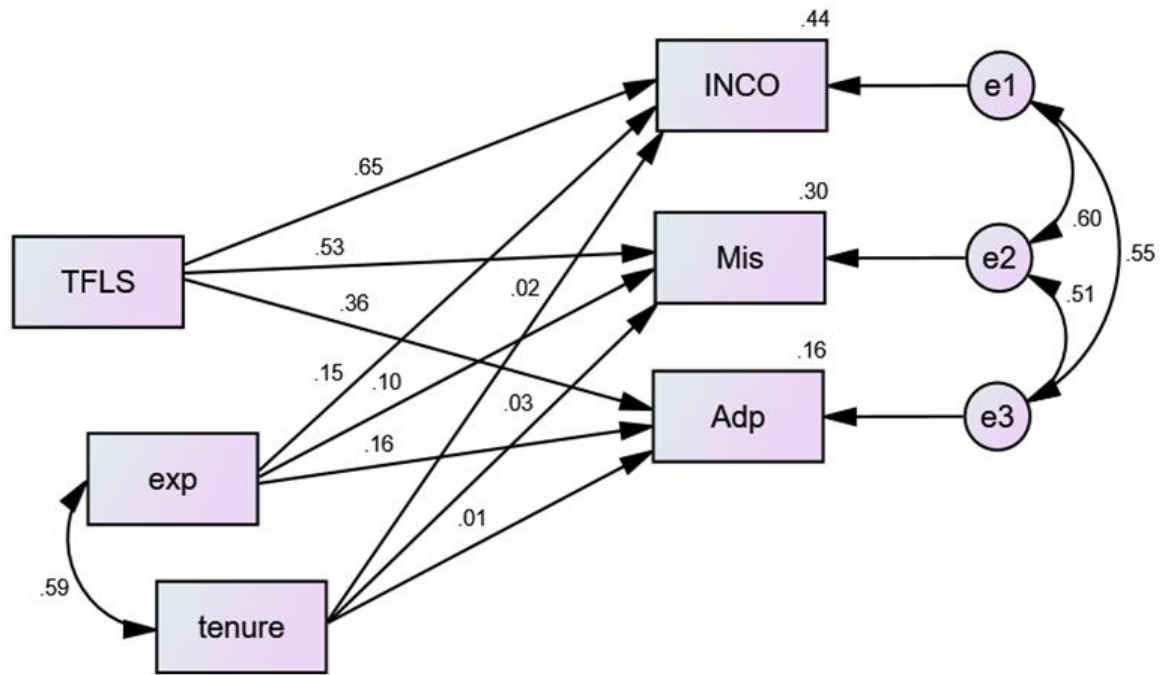


Figure 10. TFLS and organizational culture traits model  
 Source: Author's own creation

The result, as shown in Table 23, revealed that TFLS is positively and significantly related to INCO ( $\beta = 0.526$ ,  $p < .001$ ), Mis ( $\beta = 0.457$ ,  $p < .001$ ), and Adp ( $\beta = 0.229$ ,  $p < .001$ ). It means when TFLS increased by 1, the INCO increased by 0.526, Mis increased by 0.457, and Adp increased by 0.229. Furthermore, the result of the standardized estimate revealed that the contribution of TFLS in explaining the variance in INCO is greater than its contribution in explaining the variance in Mis and Adp, respectively. Accordingly, organizations that have leaders who employ more the TFLS are expected to perceive higher involvement and consistency.

Table 23. TFLS and organizational culture traits model

	Path		Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate
INCO	<---	TFLS	0.526	0.439	0.603	0.001	0.646
Mis	<---	TFLS	0.457	0.371	0.536	0.001	0.530
Adp	<---	TFLS	0.229	0.159	0.297	0.001	0.362
<b>Model Fit</b>	<b>CMIN/DF</b>	<b>GFI</b>	<b>TLI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b>Decision</b>
Default model	0.048	1	1.018	1	0	0.005	Excellent

Statistically significant: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Source: Author's calculation

Overall, the findings of path analysis and the correlation matrix analysis provide evidence of the statistically significant positive relationship between TFLS and organizational culture traits INCO, Mis, and Adp, hence confirming the applicability of H1-1.

- Model 2 - TSLS and organizational culture traits

Model 2 explains the TSLS sub-dimensions TSLS\_CR and TSLS\_CP relationships with INCO, Mis, and Adp culture traits, as shown in Figure 11. Given the dynamic nature of organizational culture, employees' experience and tenure were used as control variables for the endogenous variables to improve the model fit. Besides, the covariance among the cultural traits was considered, as they are strongly correlated. The model shows an excellent model fit, as fit measure indices were met. The total variance explained also was statistically significant with  $R^2$  values for INCO ( $R^2 = 0.29$ ,  $p < .001$ ), Mis ( $R^2 = 0.25$ ,  $p < .001$ ) and Adp ( $R^2 = 0.24$ ,  $p < .001$ ).

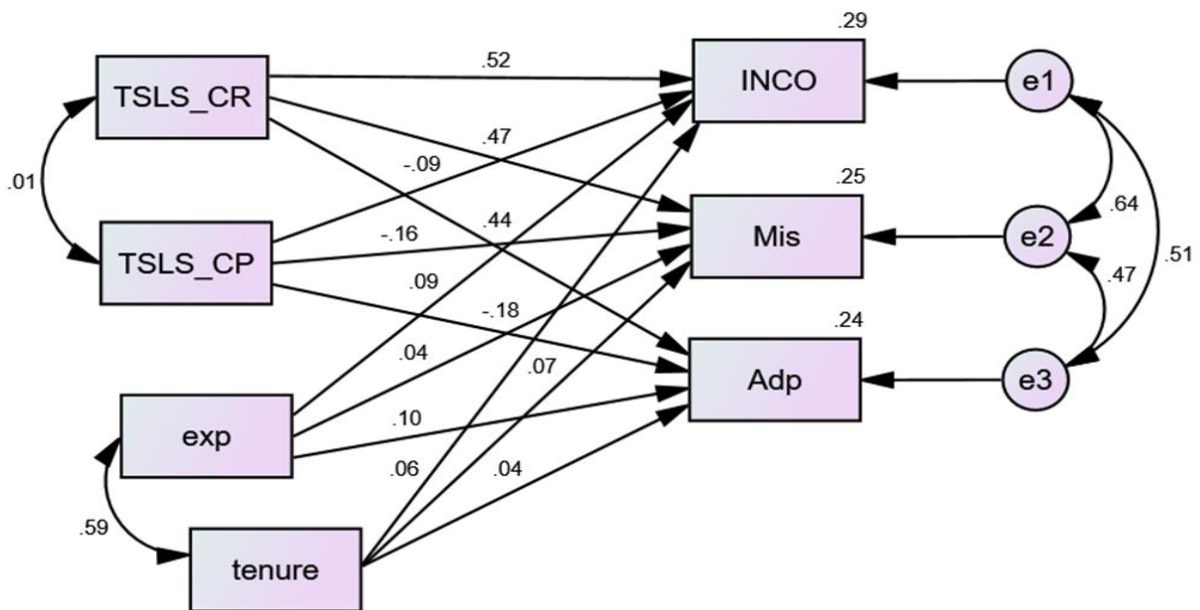


Figure 11. TSLS and organizational culture traits model  
 Source: Author's own creation

The result, as shown in Table 24, revealed that TSLS\_CR is positively and significantly related to INCO ( $\beta = 0.511$ ,  $p < .001$ ), Mis ( $\beta = 0.492$ ,  $p < .001$ ), and Adp ( $\beta = 0.337$ ,  $p < .001$ ). It means when TSLS\_CR increased by 1, the INCO increased by 0.511, Mis increased by 0.492, and Adp increased by 0.337. Furthermore, the result of the standardized estimate revealed that the contribution of TSLS\_CR in explaining the variance in INCO is greater than its contribution in explaining the variance in Mis and Adp, respectively. Accordingly, organizations that have leaders who employ more the TSLS\_CR is expected to perceive higher involvement and consistency.

On the other hand, the result revealed that TSLS\_CP is negatively and significantly related to Mis ( $\beta = -0.159$ ,  $p < .01$ ), and Adp ( $\beta = -0.130$ ,  $p < .001$ ) but insignificant association with INCO. It means when TSLS\_CP increased by 1, the Mis decreased by 0.159, and Adp decreased by

0.130. Furthermore, the result of the standardized estimate revealed that the contribution of TSLS\_CP in explaining the variance in Adp is greater than its contribution in explaining the variance in Mis. Accordingly, organizations that have leaders who employ more the TSLS\_CP are expected to perceive a reasonable issue in connection to the external adaptability and mission achievement.

Table 24. TSLS and organizational culture traits model

Path		Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate	
INCO	<---	TSLS_CR	0.511	0.421	0.609	0.001	0.515
Mis	<---	TSLS_CR	0.492	0.394	0.602	0.001	0.468
Adp	<---	TSLS_CR	0.337	0.261	0.418	0.001	0.438
INCO	<---	TSLS_CP	-0.082	-0.18	0.013	0.092	-0.089
Mis	<---	TSLS_CP	-0.159	-0.265	-0.06	0.002	-0.163
Adp	<---	TSLS_CP	-0.130	-0.204	-0.057	0.001	-0.182
Model Fit	CMIN/DF	GFI	TLI	CFI	RMSEA	SRMR	Decision
Default model	2.013	0.99	0.97	0.994	0.056	0.033	Excellent

Statistically significant: \*p<.05, \*\*p<.01, \*\*\*p<.001

Source: Author's calculation

Overall, the findings of path analysis and the correlation matrix analysis provide evidence of the statistically significant positive relationship between the TSLS\_CR and organizational culture traits INCO, Mis, and Adp, hence confirming the applicability of H1-2-a meanwhile, TSLS\_CP has a negative and statistically significant influence on Adp and Mis organizational culture traits, supporting the partial acceptance of H1-2-b. Additionally, the result shows that the contribution of the TSLS\_CR in explaining the variance in INCO, Mis and Adp is greater than the TSLS\_CP contribution in explaining the variance in INCO, Mis and Adp, which highlights the benefits of employing the TSLS\_CR instead of the TSLS\_CP.

The result of model 1, model 2, and the correlation matrix analysis as well provides enough evidence to confirm the existence of organizational culture traits and leadership styles links, hence accepting the applicability of **H1, which claimed that there is a significant links between organizational cultural traits and leadership styles.**

#### 4.5.2 Organizational culture and organizational performance models

The second hypothesis (H2), which claimed that there is a significant links between organizational cultural traits and organizational performance (Effs and ItQ), was tested through path model analysis. Because of the strong correlation between organizational culture traits and to avoid the multicollinearity effects, separated path models were tested, in which model 1 investigates whether the INCO trait statistically significantly predicted the Effs and the ItQ,

model 2 investigates whether the Mis trait statistically significantly predicted the Effs and the ItQ, and Model 3 investigates whether the Adp trait statistically significantly predicted the Effs and the ItQ. Accordingly, three sub-hypotheses were drawn, including H2-1 for model 1, H2-2 for model 2, and H2-3 for model 3.

- Model 1 – INCO and organizational performance Effs and ItQ

Model 1 explains the INCO culture trait relationships with the Effs and the ItQ, as shown in Figure 12. Given that organizational performance is sensitive to employees' characteristics, employees' their experience and tenure were used as control variables for the endogenous variables to improve the model fit. Besides, the covariance among the performance measure Effs and ItQ was considered, as they are moderately correlated. The model shows an acceptable model fit, as fit measure indices were met. The total variance explained also was statistically significant with  $R^2$  values were for ItQ ( $R^2 = 0.18$ ,  $p < .001$ ) and Effs ( $R^2 = 0.39$ ,  $p < .001$ ).

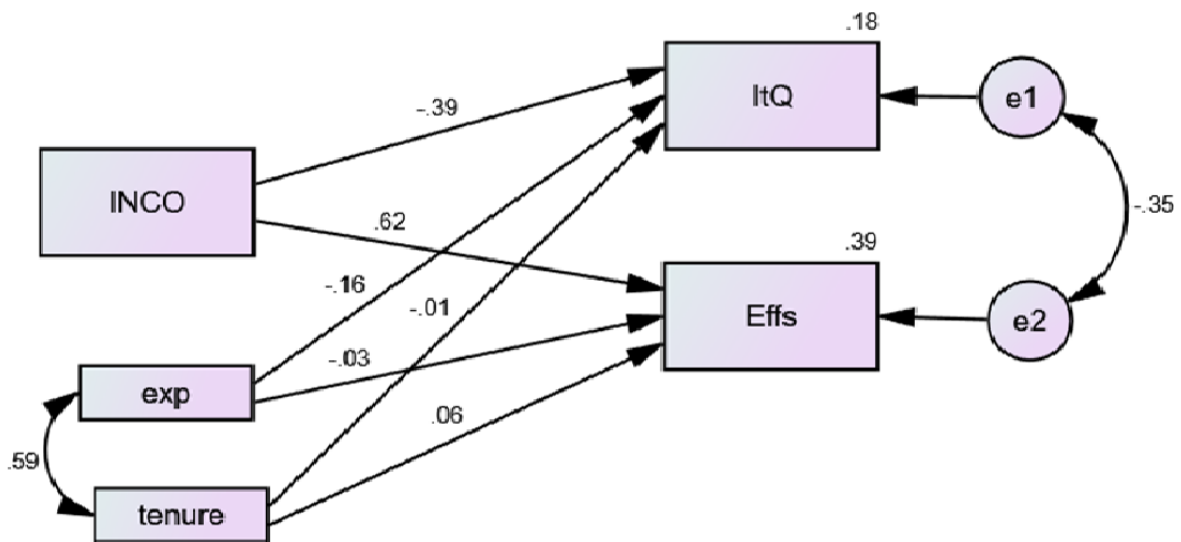


Figure 12. INCO trait and organizational performance Effs and ItQ model

Source: Author's own creation

The result, as shown in Table 25, revealed that the INCO trait is positively and significantly related to the Effs ( $\beta = 0.565$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.539$ ,  $p < .001$ ). It means when the INCO trait increased by 1, the Effs increased by 0.565, and the ItQ decreased by 0.539. Furthermore, the result of the standardized estimate revealed that the contribution of the INCO trait in explaining the variance in the Effs is greater than its contribution in explaining the variance in the ItQ. Accordingly, organizations characterized by an involvement and consistency culture are anticipated to perceive a higher organizational performance reflected by higher effectiveness and a low rate of employees' intention to quit.

Table 25. INCO trait and organizational performance Effs and ItQ

Path		Unstandardized Estimate		Lower	Upper	P-Value	Standardized Estimate	
ItQ	<---	INCO	-0.539	-0.732	-0.365	0.001	-0.393	
Effs	<---	INCO	0.565	0.444	0.689	0.001	0.621	
Model Fit		CMIN/DF	GFI	TLI	CFI	RMSEA	SRMR	Decision
Default model		3.876	0.991	0.93	0.986	0.094	0.059	Acceptable

Statistically significant: \*p<.05, \*\*p<.01, \*\*\*p<.001

Source: Author's calculation

Overall, the findings of path analysis and the correlation matrix analysis provide evidence of the statistically significant positive relationship between the INCO trait and Effs, hence confirming the applicability of H2-1-a, which claimed that the INCO and the Effs is positively related meanwhile the INCO trait has a negative and statistically significant influence on the employees ItQ, supporting acceptance of H2-1-b, which claimed a negative relationship existed between the INCO traits and ItQ. Accordingly, model hypothesis H2-1, in which the INCO is positively related to the Effs and negatively related to the ItQ, is accepted.

- Model 2 – Mis trait and organizational performance Effs and ItQ

Model 2 explains the Mis culture trait relationships with the Effs and the ItQ, as shown in Figure 13. Given that organizational performance is sensitive to employees' characteristics, employees' their experience and tenure were used as control variables for the endogenous variables to improve the model fit. Besides, the covariance among the performance measures Effs and ItQ was considered, as they are moderately correlated. The model shows an excellent model fit, as fit measure indices were met. The total variance explained also was statistically significant with R<sup>2</sup> values were for the ItQ (R<sup>2</sup> = 0.16, p < .001) and the Effs (R<sup>2</sup> = 0.37, p < .001).

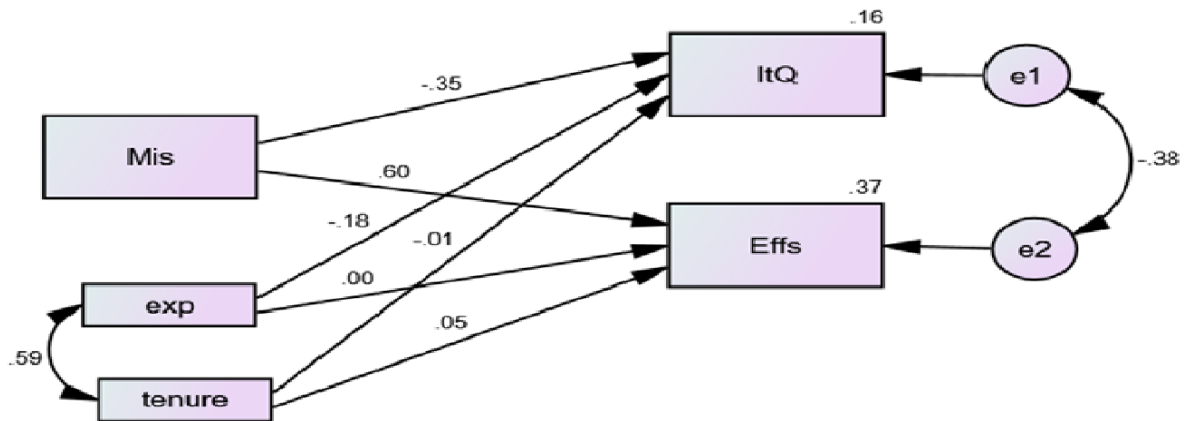


Figure 13. Mis trait and organizational performance Effs and ItQ model

Source: Author's own creation

The result, as shown in Table 26, revealed that the Mis trait is positively and significantly related to the Effs ( $\beta = 0.516$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.455$ ,  $p < .001$ ). It means when the Mis trait increased by 1, the Effs increased by 0.516, and the ItQ decreased by 0.455. Furthermore, the result of the standardized estimate revealed that the contribution of the Mis trait in explaining the variance in the Effs is greater than its contribution in explaining the variance in the ItQ. Accordingly, organizations characterized by a clear mission are anticipated to perceive a higher organizational performance reflected by higher effectiveness and a low rate of employees' intention to quit.

Table 26. Mis trait and organizational performance Effs and ItQ

Path		Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate	
ItQ	<--- Mis	-0.455	-0.591	-0.312	0.001	-0.351	
Effs	<--- Mis	0.516	0.434	0.599	0.001	0.602	
Model Fit	CMIN/DF	GFI	TLI	CFI	RMSEA	SRMR	Decision
Default model	2.189	0.995	0.97	0.994	0.06	0.045	Excellent

Statistically significant: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Source: Author's calculation

Overall, the findings of path analysis and the correlation matrix analysis provide evidence of the statistically significant positive relationship between the Mis trait and the Effs, hence confirming the applicability of H2-2-a, which claimed that the Mis trait and the Effs is positively related meanwhile the Mis trait has a negative and statistically significant influence on the employees ItQ, supporting acceptance of H2-2-b, which claimed a negative relationship existed between the Mis traits and the ItQ. Accordingly, model hypothesis H2-2, in which the Mis trait is positively related to the Effs and negatively related to the ItQ, is accepted.

- Model 3 – Adp trait and organizational performance Effs and ItQ

Model 3 explains the Adp culture trait relationships with the Effs and the ItQ, as shown in Figure 14. Given that organizational performance is sensitive to employees' characteristics, their experience and tenure were used as control variables for the endogenous variables to improve the model fit. Besides, the covariance among the performance measures Effs and ItQ was considered, as they are moderately correlated. The model shows an acceptable model fit, as fit measure indices were met. The total variance explained also was statistically significant with  $R^2$  values were for the ItQ ( $R^2 = 0.17$ ,  $p < .001$ ) and the Effs ( $R^2 = 0.26$ ,  $p < .001$ ).

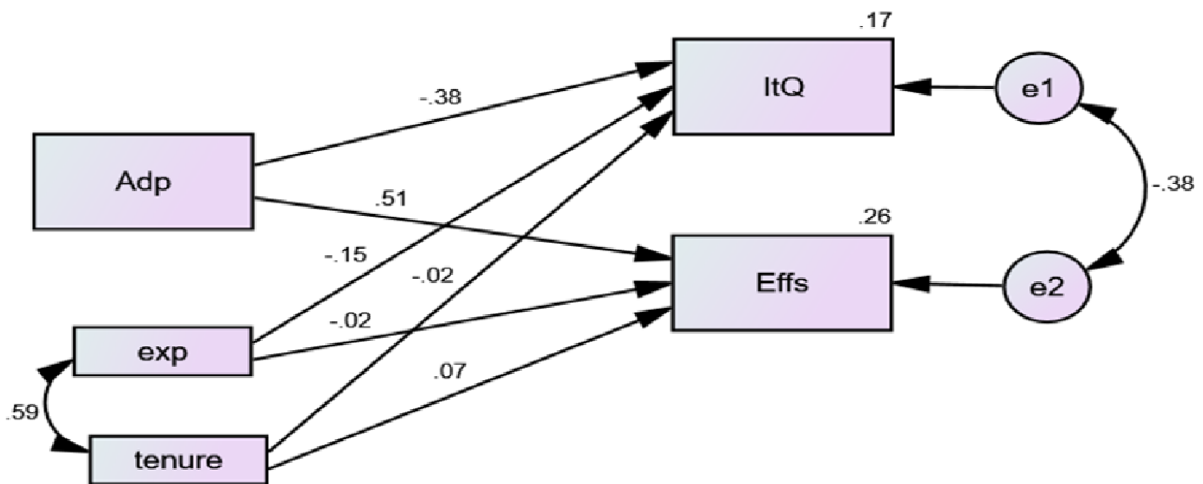


Figure 14. Adp trait and organizational performance Effs and ItQ model  
 Source: Author's own creation

The result, as shown in Table 27, revealed that the Adp trait is positively and significantly related to the Effs ( $\beta = 0.592, p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.663, p < .001$ ). It means when the Adp trait increased by 1, the Effs increased by 0.592, and the ItQ decreased by 0.663. Furthermore, the result of the standardized estimate revealed that the contribution of the Adp trait in explaining the variance in the Effs is greater than its contribution in explaining the variance in the ItQ. Accordingly, organizations characterized by an adaptability and flexibility are anticipated to perceive a higher organizational performance reflected by higher effectiveness and a low rate of employees' intention to quit.

Table 27. Adp trait and organizational performance Effs and ItQ

Path	Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate		
ItQ <--- Adp	-0.663	-0.874	-0.457	0.001	-0.375		
Effs <--- Adp	0.592	0.460	0.725	0.001	0.506		
<b>Model Fit</b>	<b>CMIN/DF</b>	<b>GFI</b>	<b>TLI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b>Decision</b>
Default model	4.198	0.99	0.91	0.982	0.099	0.058	Acceptable

Statistically significant: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Source: Author's calculation

Overall, the findings of path analysis and the correlation matrix analysis provide evidence of the statistically significant positive relationship between the Adp trait and the Effs, hence confirming the applicability of H2-3-a, which claimed that the Adp trait and the Effs is positively related, meanwhile the Adp trait has a negative and statistically significant influence on the employees ItQ, supporting acceptance of H2-3-b, which claimed a negative relationship existed between the Adp traits and the ItQ. Accordingly, model hypothesis H2-3, in which the Mis trait is positively related to the Effs and negatively related to the ItQ, is accepted.

The result of model 1, model 2, model 3, and the correlation matrix analysis as well provides enough evidence to confirm the existence of organizational culture traits and organizational performance links, hence accepting the applicability of **H2, which claimed that there is a significant links between organizational cultural traits and organizational performance.**

#### 4.5.3 Leadership styles and organizational performance models

The third hypothesis (H3), which claimed that there is a significant links between leadership styles and organizational performance (Effs and ItQ), was tested through path model analysis. Because of the strong correlation between TFLS and TSLS\_CR ( $r=.708, p<001$ ) and to avoid the multicollinearity effects, separated path models were tested, in which model 1 investigates whether the TFLS statistically significantly predicted the Effs and the ItQ meanwhile, model 2 investigates whether the TSLS statistically significantly predicted the Effs and the ItQ, Consequently, two sub-hypothesis were drawn, including H3-1 for path model 1, and H3-2 for path model 2.

- Model 1 – TFLS and organizational performance Effs and ItQ

Model 1 explains the TFLS leadership style relationships with the Effs and the ItQ, as shown in Figure 15. Given that organizational performance is sensitive to employees' characteristics, employees' their experience and tenure were used as control variables for the endogenous variables to improve the model fit. Besides, the covariance among the performance measure Effs and ItQ was considered, as they are moderately correlated. The model shows excellent model fit, as fit measure indices were met. The total variance explained also was statistically significant with  $R^2$  values were for ItQ ( $R^2 = 0.23, p < .001$ ) and Effs ( $R^2 = 0.22, p < .001$ ).

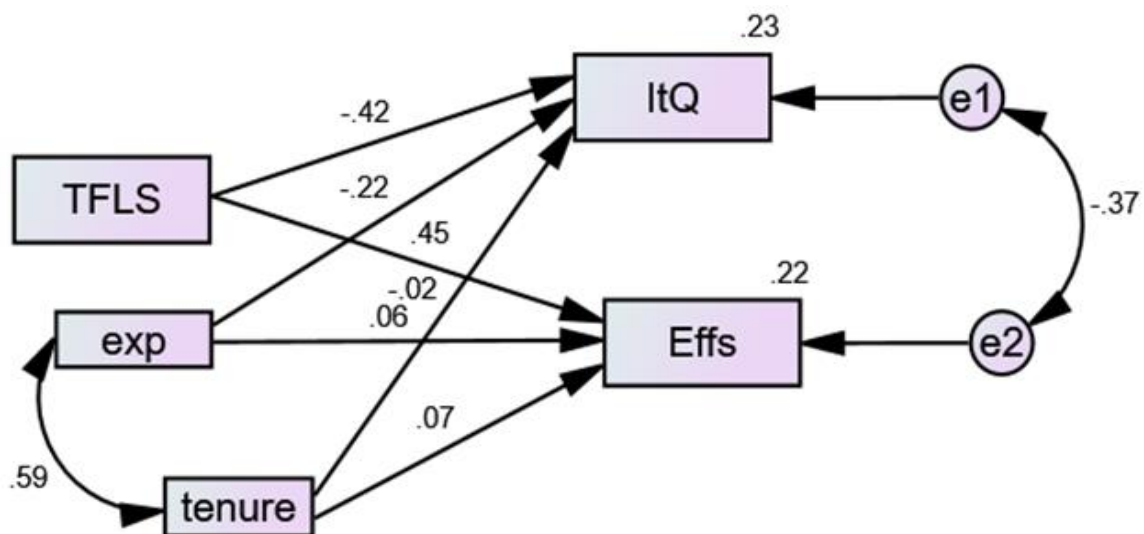


Figure 15. TFLS and organizational performance Effs and ItQ model  
Source: Author's own creation

The result, as shown in Table 28, revealed that the TFLS is positively and significantly related to the Effs ( $\beta = 0.335$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.469$ ,  $p < .001$ ). It means when the TFLS increased by 1, the Effs decreased by 0.335, and the ItQ decreased by 0.469. Furthermore, the result of the standardized estimate revealed that the contribution of the TFLS in explaining the variance in the Effs is greater than its contribution in explaining the variance in the ItQ. Accordingly, organizations that have leaders who employ more the TFLS are anticipated to perceive a higher organizational performance reflected by higher effectiveness and a low rate of employees' intention to quit.

Table 28. TFLS and organizational performance Effs and ItQ.

Path		Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate	
ItQ	<--- TFLS	-0.469	-0.601	-0.344	0.001	-0.416	
Effs	<--- TFLS	0.335	0.254	0.422	0.001	0.452	
Model Fit	CMIN/DF	GFI	TLI	CFI	RMSEA	SRMR	Decision
Default model	0.048	1	1.028	1	0	0.005	Excellent

Statistically significant: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Source: Author's calculation

Overall, the findings of path analysis and the correlation matrix analysis provide evidence of the statistically significant positive relationship between the TFLS and the Effs, hence confirming the applicability of H3-1-a, which claimed that the TFLS and the Effs is positively related, meanwhile the TFLS has a negative and statistically significant influence on the employees ItQ, supporting acceptance of H3-1-b, which claimed a negative relationship existed between the TFLS and the ItQ. Accordingly, model hypothesis H3-1, in which the TFLS is positively related to the Effs and negatively related to the ItQ, is accepted.

- Model 2 – TSLS and organizational performance Effs and ItQ

Model 2 explains the TSLS sub-dimensions TSLS\_CR and TSLS\_CP relationships with the Effs and the ItQ, as shown in Figure 16. Given that organizational performance is sensitive to employees' characteristics, employees' their experience and tenure were used as control variables for the endogenous variables to improve the model fit. Besides, the covariance among the performance measure Effs and ItQ was considered, as they are moderately correlated. The model shows excellent model fit, as fit measure indices were met. The total variance explained also was statistically significant with  $R^2$  values were for ItQ ( $R^2 = 0.18$ ,  $p < .001$ ) and Effs ( $R^2 = 0.20$ ,  $p < .001$ ).

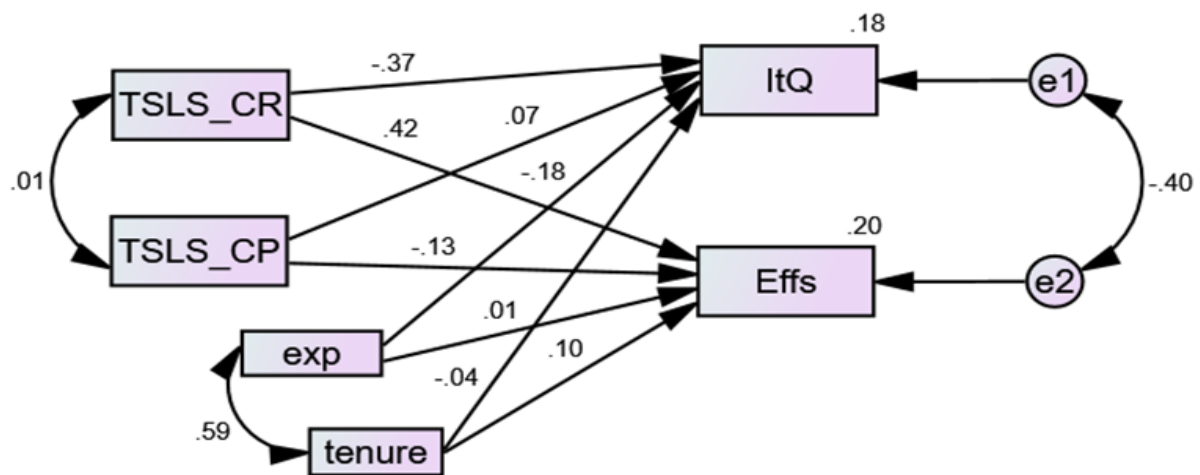


Figure 16. TSLS and organizational performance Effs and ItQ model  
 Source: Author's own creation

The result, as shown in Table 29, revealed that the TSLS\_CR is positively and significantly related to the Effs ( $\beta = 0.378, p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.504, p < .001$ ). It means when the TSLS\_CR increased by 1, the Effs increased by 0.378, and the ItQ decreased by 0.504. Furthermore, the result of the standardized estimate revealed that the contribution of the TSLS\_CR in explaining the variance in the Effs is greater than its contribution in explaining the variance in the ItQ. Accordingly, organizations that have leaders who employ more the TSLS\_CR are anticipated to perceive a higher organizational performance reflected by higher effectiveness and a low rate of employees' intention to quit.

Table 29. TSLS and organizational performance Effs and ItQ.

Path	Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate		
ItQ <--- TSLS_CR	-0.504	-0.643	-0.373	0.001	-0.367		
Effs <--- TSLS_CR	0.378	0.287	0.47	0.001	0.417		
ItQ <--- TSLS_CP	0.086	-0.056	0.21	0.239	0.067		
Effs <--- TSLS_CP	-0.107	-0.200	-0.006	0.037	-0.128		
<b>Model Fit</b>	<b>CMIN/DF</b>	<b>GFI</b>	<b>TLI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b>Decision</b>
Default model	0.048	1	1.028	1	0	0.005	Excellent

Statistically significant: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Source: Author's calculation

On the other hand, the result revealed that the TSLS\_CP is negatively and significantly related to the Effs ( $\beta = -0.107, p < .05$ ) and is positively but insignificantly related to the ItQ ( $\beta = 0.086, p > .05$ ). It means when the TSLS\_CP increased by 1, the Effs decreased by 0.10. Furthermore, the result of the standardized estimate revealed that the contribution of the TFLS\_CP in explaining the variance in the Effs is greater than its contribution in explaining the variance in the ItQ. Accordingly, organizations that have leaders who employ more the TSLS\_CP are

anticipated to perceive a lower organizational performance reflected by lower effectiveness and a high rate of employees' intention to quit.

Overall, the findings of path analysis and the correlation matrix analysis provide evidence that TSLS\_CR has a statistically significant positive impact on the Effs, hence confirming the applicability of H3-2-a, which claimed that the TSLS\_CR and the Effs is positively related, meanwhile the TFLS\_CR has a negative and statistically significant influence on the employees ItQ, supporting the acceptance of H3-2-b, which claimed a negative relationship existed between the TFLS\_CR and the ItQ. Accordingly, model sub-hypothesis H3-2, in which the TFLS\_CR is positively related to the Effs and negatively related to the employees ItQ, is accepted.

Nevertheless, the finding shows that TSLS\_CP has a statistically significant negative impact on the Effs, supporting the acceptance of H3-3-a. Furthermore, TSLS\_CP has an insignificant positive relationship with ItQ, suggesting the rejection of H3-3-b. Accordingly, model sub-hypothesis H3-3, in which the TSLS is positively related to the Effs and negatively related to the employees ItQ, is partially accepted. Additionally, the result shows that the contribution of the TSLS\_CR in explaining the variance in the Effs and the ItQ is greater than the TSLS\_CP contribution in explaining the variance in the Effs and the ItQ, which highlights the benefits of employing the TSLS\_CR instead of the TSLS\_CP. Besides, leaders need to consider the negative impact of TSLS\_CP on the organizational effectiveness and the employees ItQ.

The result of model 1, model 2, and the correlation matrix analysis as well provide enough evidence to confirm the existence of leadership styles and organizational performance links, hence accepting the applicability of **H3, which claimed that there is a significant links between leadership styles and organizational performance.**

#### *4.5.4 The job satisfaction and organizational commitment mediation role.*

After establishing the potential links between the organizational culture traits and leadership styles with organizational performance, this section will examine first the potential role of job satisfaction and organizational commitment in mediating the relationship between organizational culture traits (INCO, Mis, and Adp) and organizational performance (Effs, and ItQ), and second the potential role of job satisfaction and organizational commitment in mediating the relationship between leadership styles (TFLS and TSLS) and organizational performance (Effs, and ItQ). Accordingly, two main hypotheses were derived, including H4, which argues that job satisfaction and organizational commitment mediate the relationships

between organizational culture traits and organizational performance, and H5, which claims that job satisfaction and organizational commitment mediate the relationships between leadership styles and organizational performance.

Mediation analysis is a statistical technique for examining the indirect link between a predictor variable and an outcome variable through an intermediate variable (or mediator). The mediation analysis, as shown in figure 17, entails three variables: the predictor variable (P), the outcome variable (O) and the mediator variable (M). According to BARON and KENNY (1986), three steps required to test the mediation effect, including:

- 1- The predictor and the outcome variables need to be significantly related (Path C) before including the mediator variable.
- 2- The predictor and the mediator variables need to be significantly related (path A).
- 3- The mediator and the outcome variables need to be significantly related (path C).

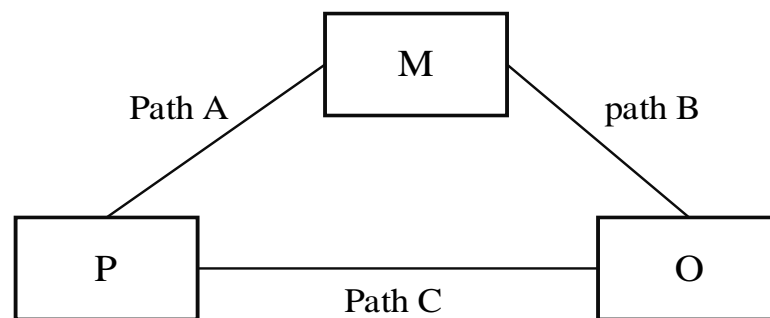


Figure 17. Mediation approach  
 Source: Author's own creation

The potential mediation appears when the relationship between the predictor variable (P) and the outcome variable (O) is reduced or becomes non-significant when including the mediator variable into the model, this suggests that the mediator variable plays a significant partially or fully mediation role in explaining the relationship between the predictor (P) and outcome (O) variables. Following the previous steps, the mediation role of Js and Ocm will be investigated to determine whether Js and Ocm have a mediation impact on the relationship between organizational culture traits and organizational performance and the relationship between leadership styles and organizational performance.

#### 4.5.4.1 Mediation effects of Job satisfaction and organizational commitment on organizational culture and organizational performance relationship.

The correlation matrix (see Table 21) shows that organizational culture traits INCO, Mis, and Adp are significantly correlated with the organizational performance measures Effs and ItQ. Besides, organizational culture traits and organizational performance measures are significantly

correlated with Js and Ocm. Thus, the first step was met. Accordingly, the fourth hypothesis (H4), which claims that job satisfaction and organizational commitment play a significant role in explaining the relationship between organizational culture traits and organizational performance, was tested through path analysis.

Due to the strong correlation between organizational culture traits and to avoid the multicollinearity effects, separated path models were tested, in which model 1 investigates whether Js and Ocm play a significant role in explaining the relationship between INCO trait and performance measures Effs and ItQ, Meanwhile model 2 whether Js and Ocm play a significant role in explaining the relationship between Mis trait and performance measures Effs and ItQ, and Model 3 whether Js and Ocm play a significant role in explaining the relationship between Adp trait and performance measures Effs and ItQ. Accordingly, three sub-hypotheses were drawn, including H4-1 for model 1, H4-2 for model 2, and H4-3 for model 3.

- Model 1 –JS and Ocm mediation effects on INCO trait relationships with Effs and ItQ

Model 1 explains the potential role of Js and Ocm in mediating the INCO trait relationships with the Effs and the ItQ, as shown in Figure 18. Given that organizational performance is sensitive to employees' characteristics, employees' their experience and tenure were used as control variables for the endogenous variables to improve the model fit.

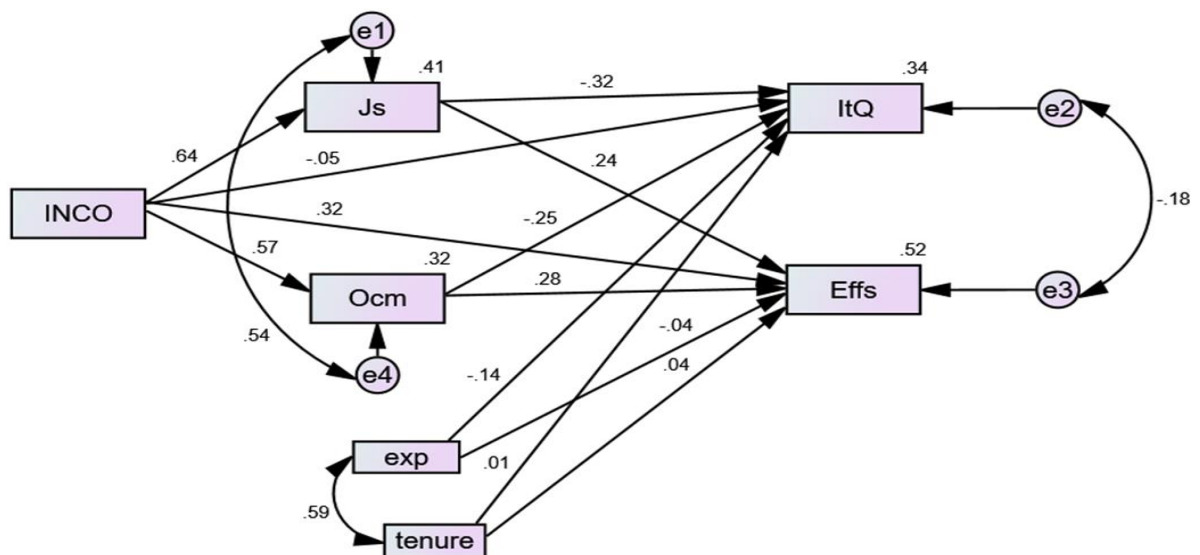


Figure 18. Js and Ocm mediation on INCO relationships with Effs and ItQ  
 Source: Author's own creation

The covariance among the performance measure Effs and ItQ was considered, as they are moderately correlated. Besides, the Js and Ocm shows a strong correlation thus a covariance link was considered too. The model shows an excellent model fit, as fit measure indices were

met. The total variance explained also was statistically significant with  $R^2$  values were for Js ( $R^2 = 0.41, p <.001$ ), Ocm ( $R^2 = 0.32, p <.001$ ), ItQ ( $R^2 = 0.34, p <.01$ ) and Effs ( $R^2 = 0.52, p <.01$ ).

The direct path result, as shown in Table 30, revealed that the INCO trait is positively and significantly related to the Js ( $\beta = 0.710, p <.001$ ), Ocm ( $\beta = 0.604, p <.001$ ) and Effs ( $\beta = 0.288, p <.001$ ) and is negatively but insignificantly related to the ItQ ( $\beta = -0.069, p >.1$ ). Furthermore, the result shows that Js is positively and significantly related to the Effs ( $\beta = 0.193, p <.01$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.397, p <.001$ ). Similarly, Ocm is positively and significantly related to the Effs ( $\beta = 0.237, p <.001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.323, p <.001$ ). Additionally, the standardized estimate revealed that Js contribution is lower than Ocm contribution in explaining the variance in the Effs, while Ocm contribution is greater than Js contribution in explaining the variance in the ItQ. Accordingly, organizations need to enhance employees job satisfaction to reduce their ItQ and enhance their commitment to improve the organizational effectiveness.

Table 30. Js and Ocm mediation on INCO relationships with Effs and ItQ

Path			Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate
<b>Direct Path</b>							
Js	<---	INCO	0.710	0.594	0.835	0.001	0.637
Ocm	<---	INCO	0.604	0.493	0.727	0.001	0.567
ItQ	<---	Js	-0.397	-0.574	-0.237	0.001	-0.323
Effs	<---	Js	0.193	0.099	0.283	0.002	0.236
ItQ	<---	INCO	-0.069	-0.261	0.116	0.566	-0.051
Effs	<---	INCO	0.288	0.193	0.398	0.001	0.316
ItQ	<---	Ocm	-0.323	-0.462	-0.187	0.001	-0.251
Effs	<---	Ocm	0.237	0.154	0.317	0.001	0.277
<b>Indirect Path</b>							
INCO --> Js --> ItQ			-0.282	-0.416	-0.158	0.001	-0.206**
INCO --> Js --> Effs			0.137	0.079	0.204	0.001	0.150**
INCO --> Ocm --> ItQ			-0.195	-0.289	-0.118	0.001	-0.142***
INCO --> Ocm --> Effs			0.143	0.090	0.203	0.001	0.157***
<b>Model Fit</b>	<b>CMIN/DF</b>	<b>GFI</b>	<b>TLI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b>Decision</b>
Default model	1.881	0.99	0.98	0.994	0.052	0.071	Excellent

Statistically significant: \* $p <.05$ , \*\* $p <.01$ , \*\*\* $p <.001$

Source: Author's calculation

The indirect path result showed that the INCO trait has a significant positive indirect impact on Effs via Js and Ocm with ( $\beta = 0.137, p <.001$ ) and ( $\beta = 0.143, p <.001$ ), respectively. Furthermore, the INCO trait has a significant negative impact on ItQ via Js and Ocm with ( $\beta = -0.282, p <.001$ )

and ( $\beta = -0.195, p < .001$ ), respectively. Hence, the result provides enough evidence to support the acceptance of the model's sub-hypotheses, including H4-1-a, which claims that Js plays a significant role in explaining the INCO relationships with the Effs and the ItQ, and H4-1-b, which claims that Ocm plays a significant role in explaining the INCO relationships with the Effs and the ItQ. Yet, the mediation impacts were partially for the Effs and fully for the ItQ.

The result of model 1 path analysis suggests that both variables Js and Ocm play a significant role in explaining the INCO trait relationships with the Effs and the ItQ. Accordingly, the model main hypothesis H4-1, which claims that Js and Ocm play a significant role in mediating the INCO trait relationships with Effs and ItQ, is accepted.

- Model 2 –Js and Ocm mediation effects on Mis trait relationships with Effs and ItQ

Model 2 explains the potential role of Js and Ocm in mediating the Mis trait relationships with the Effs and the ItQ, as shown in Figure 19. Given that organizational performance is sensitive to employees' characteristics, employees' their experience and tenure were used as control variables for the endogenous variables to improve the model fit. The covariance among the performance measure Effs and ItQ was considered, as they are moderately correlated. Besides, the Js and Ocm shows a strong correlation thus a covariance link was considered too. The model shows an excellent model fit, as fit measure indices were met. The total variance explained also was statistically significant with  $R^2$  values were for Js ( $R^2 = 0.30, p < .001$ ), Ocm ( $R^2 = 0.29, p < .001$ ), ItQ ( $R^2 = 0.34, p < .01$ ) and Effs ( $R^2 = 0.53, p < .01$ ).

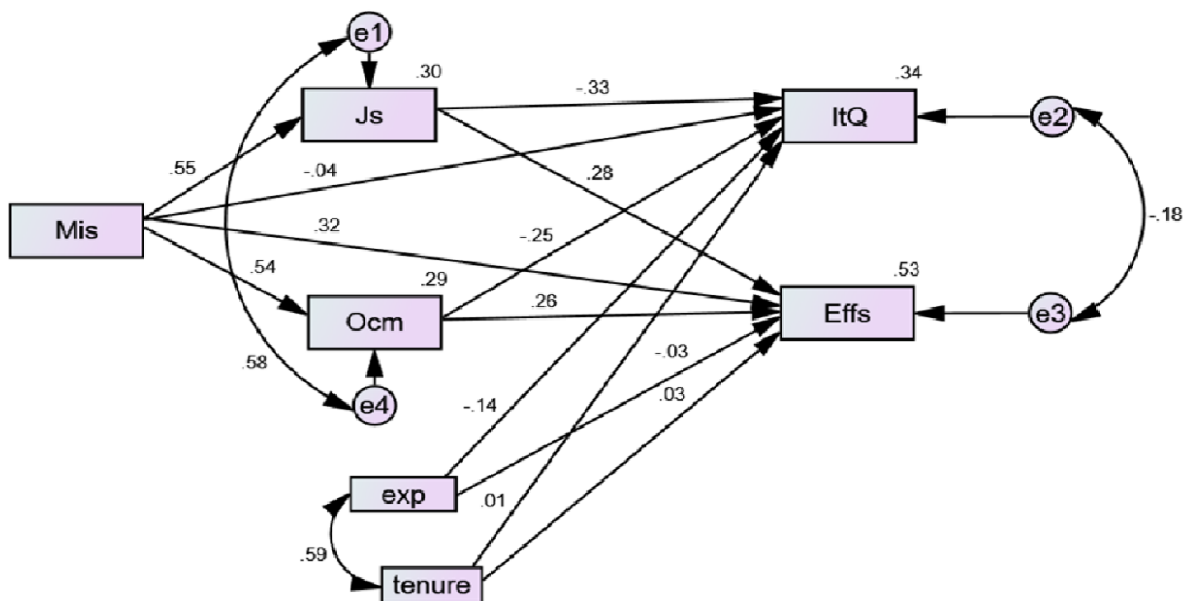


Figure 19. Js and Ocm mediation on Mis relationships with Effs and ItQ  
 Source: Author's own creation

The direct path result, as shown in Table 31, revealed that the Mis trait is positively and significantly related to the Js ( $\beta = 0.574$ ,  $p < .001$ ), Ocm ( $\beta = 0.538$ ,  $p < .001$ ) and Effs ( $\beta = 0.271$ ,  $p < .001$ ), and is negatively but insignificantly related to the ItQ ( $\beta = -0.056$ ,  $p > .1$ ). Furthermore, the result shows that Js is positively and significantly related to the Effs ( $\beta = 0.228$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.408$ ,  $p < .001$ ). Similarly, Ocm is positively and significantly related to the Effs ( $\beta = 0.220$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.322$ ,  $p < .001$ ). Additionally, the standardized estimate revealed that Js contribution is greater than Ocm contribution in explaining the variance in the Effs and ItQ. Accordingly, organizations need to enhance employees job satisfaction to reduce their ItQ and to improve the organizational effectiveness.

Table 31. Js and Ocm mediation on Mis relationships with Effs and ItQ

Path			Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate	
<b>Direct Path</b>								
Js	<---	Mis	0.574	0.488	0.669	0.001	0.546	
Ocm	<---	Mis	0.538	0.458	0.627	0.001	0.535	
ItQ	<---	Js	-0.408	-0.555	-0.265	0.001	-0.332	
Effs	<---	Js	0.228	0.149	0.312	0.001	0.279	
ItQ	<---	Mis	-0.056	-0.189	0.087	0.549	-0.043	
Effs	<---	Mis	0.271	0.196	0.344	0.001	0.316	
ItQ	<---	Ocm	-0.322	-0.463	-0.184	0.001	-0.250	
Effs	<---	Ocm	0.220	0.129	0.304	0.001	0.257	
<b>Indirect Path</b>								
Mis --> Js --> ItQ			-0.234	-0.343	-0.150	0.001	-0.181***	
Mis --> Js --> Effs			0.131	0.089	0.187	0.001	0.152***	
Mis --> Ocm --> ItQ			-0.173	-0.257	-0.106	0.001	-0.134***	
Mis --> Ocm --> Effs			0.118	0.068	0.170	0.001	0.138***	
<b>Model Fit</b>		<b>CMIN/DF</b>	<b>GFI</b>	<b>TLI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b>Decision</b>
Default model		1.694	0.991	0.984	0.995	0.046	0.067	Excellent
Statistically significant: * $p < .05$ , ** $p < .01$ , *** $p < .001$								

Source: Author's calculation

The indirect path result showed that the Mis trait has a significant positive indirect impact on Effs via Js and Ocm with ( $\beta = 0.131$ ,  $p < .001$ ) and ( $\beta = 0.118$ ,  $p < .001$ ), respectively. Furthermore, the Mis trait has a significant negative impact on ItQ via Js and Ocm with ( $\beta = -0.234$ ,  $p < .001$ ) and ( $\beta = -0.173$ ,  $p < .001$ ), respectively. Hence, the result provides enough evidence to support the acceptance of the model's sub-hypotheses, including H4-2-a, which claims that Js plays a significant role in explaining the Mis relationships with the Effs and the ItQ, and H4-2-b, which

claims that Ocm plays a significant role in explaining the Mis relationships with the Effs and the ItQ. Yet, the mediation impacts were partially for the Effs and fully for the ItQ.

The result of model 2 path analysis suggests that both variables Js and Ocm play a significant role in explaining the Mis trait relationships with the Effs and the ItQ. Accordingly, the model main hypothesis H4-2, which claims that Js and Ocm play a significant role in mediating the Mis trait relationships with Effs and ItQ, is accepted.

- Model 3 –Js and Ocm mediation effects on Asp trait relationships with Effs and ItQ

Model 2 explains the potential role of Js and Ocm in mediating the Adp trait relationships with the Effs and the ItQ, as shown in Figure 20. Given that organizational performance is sensitive to employees' characteristics, employees' their experience and tenure were used as control variables for the endogenous variables to improve the model fit. The covariance among the performance measure Effs and ItQ was considered, as they are moderately correlated. Besides, the Js and Ocm shows a strong correlation thus a covariance link was considered too. The model shows an excellent model fit, as fit measure indices were met. The total variance explained also was statistically significant with  $R^2$  values were for Js ( $R^2 = 0.21$ ,  $p < .001$ ), Ocm ( $R^2 = 0.14$ ,  $p < .001$ ), ItQ ( $R^2 = 0.36$ ,  $p < .01$ ) and Effs ( $R^2 = 0.52$ ,  $p < .01$ ).

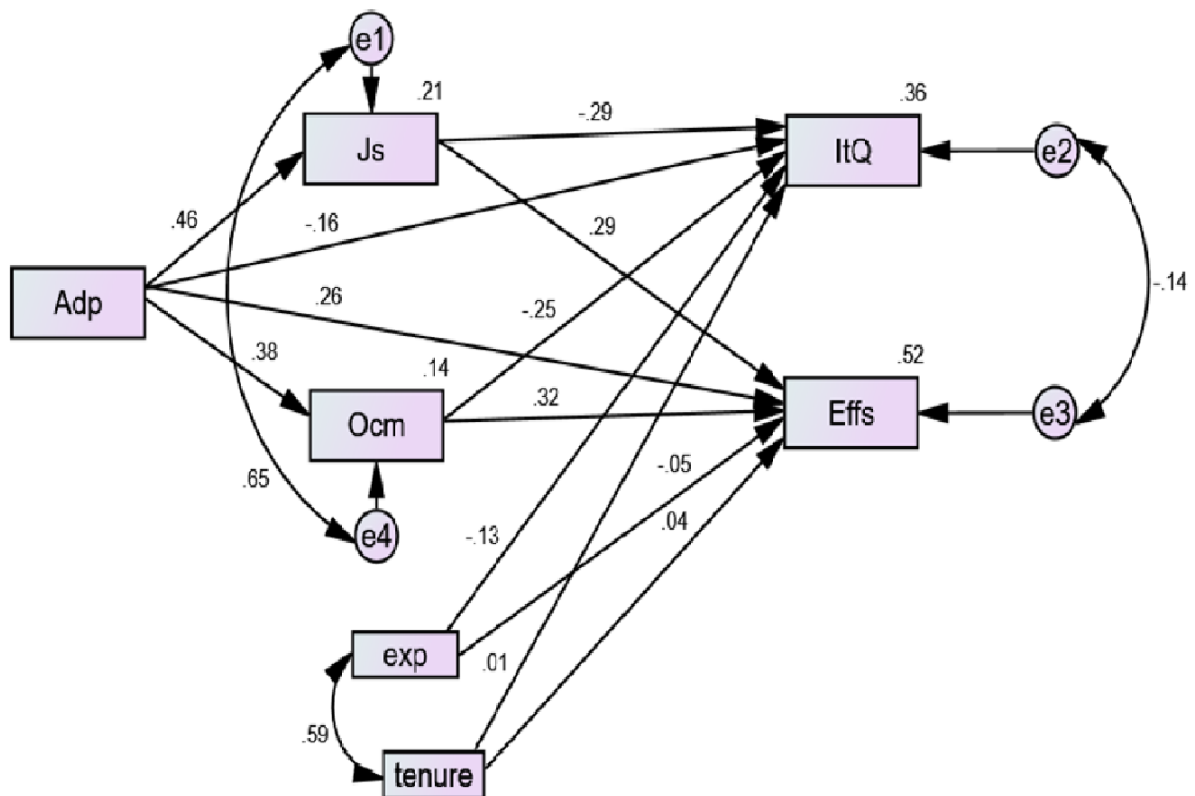


Figure 20. Js and Ocm mediation on Adp relationships with Effs and ItQ  
 Source: Author's own creation

The direct path result, as shown in Table 32, revealed that the Adp trait is positively and significantly related to the Js ( $\beta = 0.654$ ,  $p < .001$ ), Ocm ( $\beta = 0.516$ ,  $p < .001$ ) and Effs ( $\beta = 0.304$ ,  $p < .001$ ), and is negatively and significantly related to the ItQ ( $\beta = -0.280$ ,  $p < .05$ ). Furthermore, the result shows that Js is positively and significantly related to the Effs ( $\beta = 0.236$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.354$ ,  $p < .001$ ).

Similarly, Ocm is positively and significantly related to the Effs ( $\beta = 0.277$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.316$ ,  $p < .001$ ). Additionally, the standardized estimate revealed that Ocm contribution is greater than Js contribution in explaining the variance in the Effs, while Js contribution is greater than Ocm contribution in explaining the variance in the ItQ. Accordingly, organizations need to enhance employees job satisfaction to reduce their ItQ and enhance their commitment to improve the organizational effectiveness.

Table 32. Js and Ocm mediation on Adp relationships with Effs and ItQ

Path		Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate	
<b>Direct Path</b>							
Js	<--- Adp	0.654	0.521	0.784	0.001	0.456	
Ocm	<--- Adp	0.516	0.409	0.635	0.001	0.376	
ItQ	<--- Js	-0.354	-0.518	-0.217	0.001	-0.288	
Effs	<--- Js	0.236	0.152	0.317	0.001	0.287	
ItQ	<--- Adp	-0.280	-0.473	-0.094	0.013	-0.159	
Effs	<--- Adp	0.304	0.207	0.405	0.001	0.259	
ItQ	<--- Ocm	-0.316	-0.454	-0.177	0.001	-0.246	
Effs	<--- Ocm	0.277	0.187	0.356	0.001	0.323	
<b>Indirect Path</b>							
Adp --> Js --> ItQ		-0.232	-0.354	-0.129	0.001	-0.132***	
Adp --> Js --> Effs		0.154	0.104	0.226	0.001	0.131***	
Adp --> Ocm --> ItQ		-0.163	-0.249	-0.096	0.001	-0.093***	
Adp --> Ocm --> Effs		0.143	0.094	0.201	0.001	0.121***	
<b>Model Fit</b>							
	<b>CMIN/DF</b>	<b>GFI</b>	<b>TLI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b>Decision</b>
Default model	2.167	0.989	0.97	0.992	0.06	0.073	Excellent
Statistically significant: * $p < .05$ , ** $p < .01$ , *** $p < .001$							

Source: Author's calculation

The indirect path result showed that the Adp trait has a significant positive indirect impact on Effs via Js and Ocm with ( $\beta = 0.154$ ,  $p < .001$ ) and ( $\beta = 0.143$ ,  $p < .001$ ), respectively. Furthermore, the Adp trait has a significant negative impact on ItQ via Js and Ocm with ( $\beta = -0.232$ ,  $p < .001$ ) and ( $\beta = -0.163$ ,  $p < .001$ ), respectively. Hence, the result provides enough evidence to support the acceptance of the model's sub-hypotheses, including H4-3-a, which claims that Js plays a

significant role in explaining the Adp relationships with the Effs and the ItQ, and H4-3-b, which claims that Ocm plays a significant role in explaining the Adp relationships with the Effs and the ItQ. Yet, the mediation impacts were partially for both variables the Effs and the ItQ.

The result of model 3 path analysis suggests that both variables Js and Ocm play a significant role in explaining the Adp trait relationships with the Effs and the ItQ. Accordingly, the model main hypothesis H4-3, which claims that Js and Ocm play a significant role in mediating the Adp trait relationships with Effs and ItQ, is accepted.

Overall, the findings of model 1, model 2, and model 3 revealed that job satisfaction and organizational commitment have the potential to play an intermediate role in explaining the organizational culture traits relationships with organizational performance. Both variables have a significant contribution either in reducing the employees ItQ or in enhancing the organizational effectiveness, hence, the findings support the acceptance of **H4, which claimed that job satisfaction and organizational commitment play a significant role in explaining the relationship between organizational culture traits and organizational performance.**

#### 4.5.4.2 Mediation effects of Job satisfaction and organizational commitment on leadership styles and organizational performance relationship.

The correlation matrix (see Table 21) shows that leadership styles TFLS and TSLS\_CR are significantly correlated with the organizational performance measures Effs and ItQ. Besides, leadership styles TFLS and TSLS\_CR and organizational performance measures are significantly correlated with Js and Ocm. Meanwhile the TSLS\_CP styles is excluded from the mediation analysis as it does not show a significant correlation with the Js, Ocm. and ItQ, suggesting that the first step of mediation was only met for TFLS and TFLS\_CR relationships with Effs and ItQ.

Consequently, the fifth hypothesis (H5), which claims that job satisfaction and organizational commitment play a significant role in explaining the relationship between leadership styles (TFLS and TSLS\_CR) and organizational performance (Effs and ItQ), was tested through path analysis. However, because of the strong correlation between leadership styles and to avoid the multicollinearity effects, separated path models were tested, in which model 1 investigates whether Js and Ocm play a significant role in explaining the relationship between TFLS style and performance measures Effs and ItQ, and model 2 investigates whether Js and Ocm play a significant role in explaining the relationship between TSLS\_CR style and performance measures Effs and ItQ. Accordingly, two sub-hypotheses were drawn, including H5-1 for model 1, and H5-2 for model 2.

- Model 1 - JS and Ocm mediation effects on TFLS relationships with Effs and ItQ

Model 1 explains the potential role of Js and Ocm in mediating the TFLS style relationships with the Effs and the ItQ, as shown in Figure 21. Given that organizational performance is sensitive to employees' characteristics, employees' their experience and tenure were used as control variables for the endogenous variables to improve the model fit. The covariance among the performance measure Effs and ItQ was considered, as they are moderately correlated. Besides, the Js and Ocm shows a strong correlation thus a covariance link was considered too. The model shows an excellent model fit, as fit measure indices were met. The total variance explained also was statistically significant with  $R^2$  values were for Js ( $R^2 = 0.36$ ,  $p < .001$ ), Ocm ( $R^2 = 0.26$ ,  $p < .001$ ), ItQ ( $R^2 = 0.35$ ,  $p < .01$ ) and Effs ( $R^2 = 0.46$ ,  $p < .01$ ).

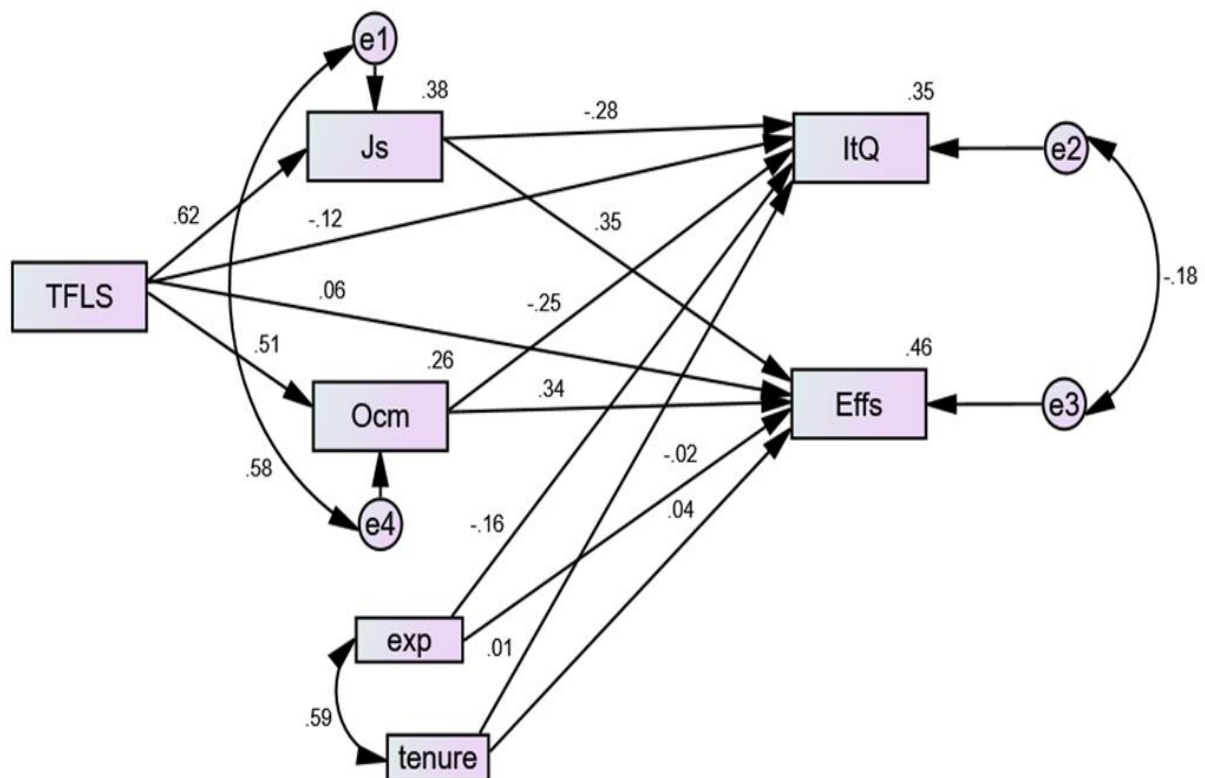


Figure 21. Js and Ocm mediation on TFLS relationships with Effs and ItQ

Source: Author's own creation

The direct path result, as shown in Table 33, revealed that the TFLS style is positively and significantly related to the Js ( $\beta = 0.562$ ,  $p < .001$ ), Ocm ( $\beta = 0.440$ ,  $p < .001$ ). Besides TFLS style has an insignificant positive impact on the Effs ( $\beta = 0.043$ ,  $p > .05$ ), and an insignificant negative impact on the ItQ ( $\beta = -0.136$ ,  $p > .05$ ). Furthermore, the result shows that Js is positively and significantly related to the Effs ( $\beta = 0.288$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.345$ ,  $p < .001$ ). Similarly, Ocm is positively and significantly related to the Effs ( $\beta = 0.294$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.316$ ,  $p < .001$ ).

Additionally, the standardized estimate revealed that Js contribution is greater than Ocm contribution in explaining the variance in the Effs and the ItQ. Accordingly, organizations leaders need to enhance employees job satisfaction to reduce their ItQ and enhance the organizational effectiveness.

Table 33. Js and Ocm mediation on TFLS relationships with Effs and ItQ

Path			Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate
<b>Direct Path</b>							
Js	<---	TFLS	0.562	0.461	0.657	0.001	0.620
Ocm	<---	TFLS	0.440	0.340	0.549	0.001	0.508
ItQ	<---	Js	-0.345	-0.534	-0.146	0.001	-0.280
Effs	<---	Js	0.288	0.181	0.408	0.001	0.352
ItQ	<---	TFLS	-0.136	-0.290	0.032	0.106	-0.122
Effs	<---	TFLS	0.043	-0.048	0.119	0.337	0.058
ItQ	<---	Ocm	-0.316	-0.478	-0.153	0.001	-0.246
Effs	<---	Ocm	0.294	0.187	0.389	0.001	0.344
<b>Indirect Path</b>							
TFLS --> Js --> ItQ			-0.194	-0.295	-0.102	0.001	-0.174**
TFLS --> Js --> Effs			0.162	0.11	0.226	0.001	0.219***
TFLS --> Ocm --> ItQ			-0.139	-0.207	-0.082	0.001	-0.125***
TFLS --> Ocm --> Effs			0.129	0.087	0.182	0.001	0.175***
<b>Model Fit</b>	<b>CMIN/DF</b>	<b>GFI</b>	<b>TLI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b>Decision</b>
Default model	2.972	0.985	0.953	0.987	0.078	0.059	Excellent
Statistically significant: *p<.05, **p<.01, ***p<.001							

Source: Author's calculation

The indirect path result showed that the TFLS style has a significant positive indirect impact on Effs via Js and Ocm with ( $\beta = 0.162$ ,  $p < .001$ ) and ( $\beta = 0.129$ ,  $p < .001$ ), respectively. Furthermore, the TFLS style has a significant negative impact on ItQ via Js and Ocm with ( $\beta = -0.194$ ,  $p < .001$ ) and ( $\beta = -0.139$ ,  $p < .001$ ), respectively. Hence, the result provides enough evidence to support the acceptance of the model's sub-hypotheses, including H5-1-a, which claims that Js plays a significant role in explaining the TFLS relationships with the Effs and the ItQ, and H5-1-b, which claims that Ocm plays a significant role in explaining the TFLS relationships with the Effs and the ItQ. Yet, the mediation impacts were fully for both variables the Effs and the ItQ.

The result of model 1 path analysis suggests that both variables Js and Ocm play a significant role in explaining the TFLS style relationships with the Effs and the ItQ. Accordingly, the model main hypothesis H5-1, which claims that Js and Ocm play a significant role in mediating the TFLS styles relationships with Effs and ItQ, is accepted.

- Model 2 - JS and Ocm mediation effects on TSLS\_CR relationships with Effs and ItQ

Model 2 explains the potential role of Js and Ocm in mediating the TSLS\_CR style relationships with the Effs and the ItQ, as shown in Figure 22. Given that organizational performance is sensitive to employees' characteristics, employees' their experience and tenure were used as control variables for the endogenous variables to improve the model fit. The covariance among the performance measure Effs and ItQ was considered, as they are moderately correlated. Besides, the Js and Ocm shows a strong correlation thus a covariance link was considered too. The model shows an excellent model fit, as fit measure indices were met. The total variance explained also was statistically significant with  $R^2$  values were for Js ( $R^2 = 0.23$ ,  $p < .001$ ), Ocm ( $R^2 = 0.17$ ,  $p < .001$ ), ItQ ( $R^2 = 0.35$ ,  $p < .01$ ) and Effs ( $R^2 = 0.47$ ,  $p < .01$ ).

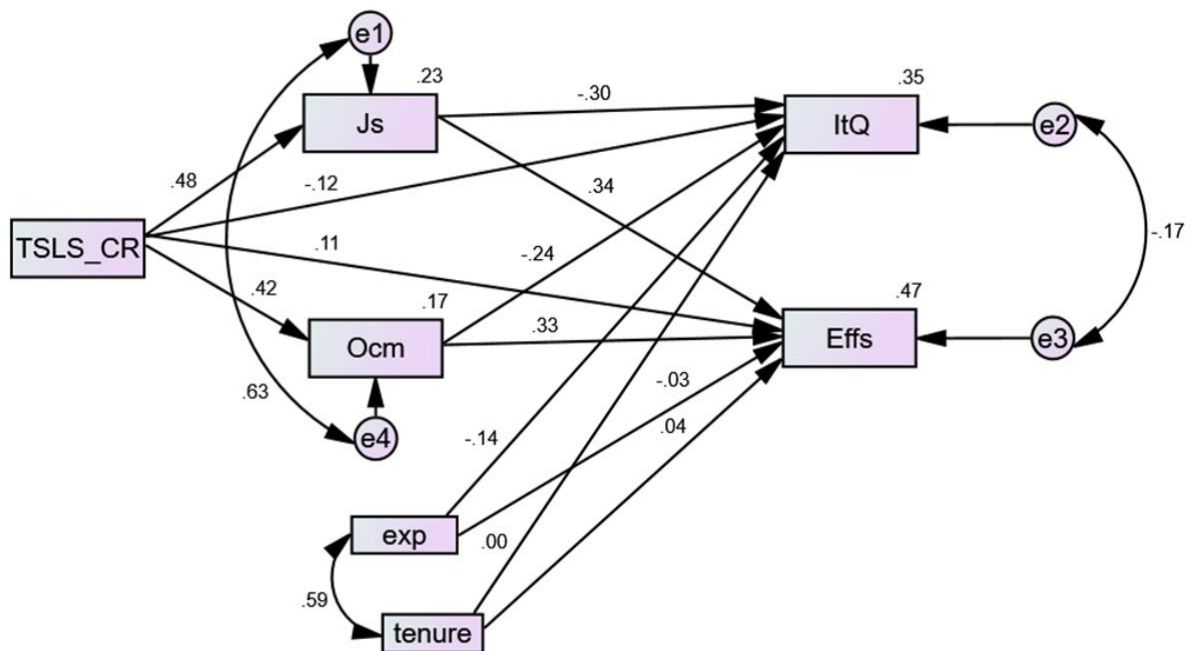


Figure 22. Js and Ocm mediation on TSLS\_CR relationships with Effs and ItQ

Source: Author's own creation

The direct path result, as shown in Table 34, revealed that the TSLS\_CR style is positively and significantly related to the Js ( $\beta = 0.533$ ,  $p < .001$ ), Ocm ( $\beta = 0.440$ ,  $p < .001$ ). Besides TSLS\_CR style has a significant positive impact on the Effs ( $\beta = 0.102$ ,  $p < .05$ ), and a significant negative impact on the ItQ ( $\beta = -0.170$ ,  $p < .05$ ). Moreover, the result shows that Js is positively and significantly related to the Effs ( $\beta = 0.278$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.367$ ,  $p < .001$ ). Likewise, Ocm is positively and significantly related to the Effs ( $\beta = 0.286$ ,  $p < .001$ ) and is negatively and significantly related to the ItQ ( $\beta = -0.313$ ,  $p < .001$ ). Additionally, the standardized estimate revealed that Js contribution is greater than Ocm contribution in explaining the variance in the Effs and the ItQ. Accordingly, organizations

leaders need to enhance employees job satisfaction to reduce their ItQ and enhance the organizational effectiveness.

Table 34. Js and Ocm mediation on TSLS\_ CR relationships with Effs and ItQ

Path		Unstandardized Estimate	Lower	Upper	P-Value	Standardized Estimate	
<b>Direct Path</b>							
Js	<--- TSLS_CR	0.533	0.437	0.635	0.001	0.481	
Ocm	<--- TSLS_CR	0.440	0.344	0.538	0.001	0.415	
ItQ	<--- Js	-0.367	-0.518	-0.219	0.001	-0.299	
Effs	<--- Js	0.278	0.198	0.369	0.001	0.341	
ItQ	<--- TSLS_CR	-0.170	-0.299	-0.031	0.038	-0.124	
Effs	<--- TSLS_CR	0.102	0.023	0.170	0.030	0.113	
ItQ	<--- Ocm	-0.313	-0.455	-0.174	0.001	-0.244	
Effs	<--- Ocm	0.286	0.194	0.367	0.001	0.335	
<b>Indirect Path</b>							
TSLS_CR --> Js --> ItQ		-0.196	-0.293	-0.114	0.001	-0.144**	
TSLS_CR --> Js --> Effs		0.148	0.105	0.212	0.001	0.164***	
TSLS_CR --> Ocm --> ItQ		-0.138	-0.205	-0.079	0.001	-0.101***	
TSLS_CR --> Ocm --> Effs		0.126	0.085	0.175	0.001	0.139***	
<b>Model Fit</b>	<b>CMIN/DF</b>	<b>GFI</b>	<b>TLI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>SRMR</b>	<b>Decision</b>
Default model	2.193	0.989	0.969	0.991	0.06	0.059	Excellent
Statistically significant: *p<.05, **p<.01, ***p<.001							

Source: Author's calculation

The indirect path result showed that the TSLS\_CR style has a significant positive indirect impact on Effs via Js and Ocm with ( $\beta = 0.148$ ,  $p < .001$ ) and ( $\beta = 0.126$ ,  $p < .001$ ), respectively. Furthermore, the TSLS\_CR style has a significant negative impact on ItQ via Js and Ocm with ( $\beta = -0.196$ ,  $p < .01$ ) and ( $\beta = -0.138$ ,  $p < .001$ ), respectively. Hence, the result provides enough evidence to support the acceptance of the model's sub-hypotheses, including H5-2-a, which claims that Js plays a significant role in explaining the TSLS\_CR style relationships with the Effs and the ItQ, and H5-2-b, which claims that Ocm plays a significant role in explaining the TSLS\_CR style relationships with the Effs and the ItQ. Yet, the mediation impacts were partially for both variables the Effs and the ItQ.

The result of model 2 path analysis suggests that both variables Js and Ocm play a significant role in explaining the TSLS\_CR style relationships with the Effs and the ItQ. Accordingly, the model main hypothesis H5-2, which claims that Js and Ocm play a significant role in mediating the TSLS\_CR styles relationships with Effs and ItQ, is accepted.

Overall, the findings of model 1, and model 2 revealed that job satisfaction and organizational commitment have the potential to play an intermediate role in explaining the leadership styles relationships with organizational performance. Both variables have a significant contribution either in reducing the employees ItQ or in enhancing the organizational effectiveness, hence, the findings support the acceptance of **H5, which claimed that job satisfaction and organizational commitment play a significant role in explaining the relationship between leadership styles and organizational performance.**

## 5. CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Conclusions

The study was conducted aiming to discover the links between organizational culture and leadership styles and their impact on organizational performance. The Jordanian insurance sector was chosen as a study sample to satisfy this aim, in which 15 insurance companies were included, with 328 valid responses for the analysis. This study intended to answer questions about organizational culture and leadership styles relationships and how they could influence organizational performance. Hence, to achieve the study aims, subsequent steps were employed, which started by explaining the interrelationship between two leadership styles, including (TFLS and TSLS) and several organizational culture traits, including (INCO, Mis, and Adp), followed by examining the relations of each leadership style and organizational culture traits with organizational performance measures, including the Effs and the employees' ItQ. Table 35 illustrates the summary of the interrelationships among organizational culture, leadership styles and organizational performance.

*Table 35. Summary of cultural traits, leadership styles, and performance links*

No.	Hypothesis	Result
H1	There is a significant links between organizational cultural traits and leadership styles	Accepted
H1-1	TFLS has a positive and significant influence on organizational culture traits, including INCO, Mis and Adp	Accepted
H1-2	TSLS has a significant influence on organizational culture traits, including INCO, Mis and Adp	Accepted
H1-2-a	TSLS_CR has a positive and significant influence on organizational culture traits including INCO, Mis and Adp	Accepted
H1-2-a	TSLS_CP has a negative and significant influence on organizational culture traits including INCO, Mis and Adp	Partially accepted
H2	There is a significant links between organizational cultural traits and organizational performance the Effs and the ItQ	Accepted
H2-1	The INCO trait is positively related to the Effs and negatively related to the ItQ	Accepted
H2-2	The Mis trait is positively related to the Effs and negatively related to the ItQ	Accepted
H2-3	The Adp trait is positively related to the Effs and negatively related to the ItQ	Accepted
H3	There is a significant links between the leadership styles and organizational performance the Effs and the ItQ	Accepted
H3-1	The TFLS is positively related to the Effs and negatively related to the ItQ	Accepted
H3-2	The TSLS is positively related to the Effs and negatively related to the ItQ	Partially accepted
H3-2-a	The TSLS_CR is positively related to the Effs and negatively related to the ItQ	Accepted
H3-2-b	The TSLS_CP is positively related to the Effs and negatively related to the ItQ	rejected

- Leadership styles and organizational culture

The result showed that company leaders play a significant role in shaping or altering the organizational culture that is established within the company. There are several leadership styles that can be used by companies leaders, including autocratic, democratic, laissez-faire, supportive, transformational, and transactional, among others. Each of these leadership styles defer in its approach to decision-making, way of communication, motivation, and tasks delegation. The leadership style that a company's leaders adopt can influence the company's culture (TOJARI et al., 2011).

The result showed that the transformational leadership style (TFLS) has a significant role in maintaining a strong internal culture, that is, by enhancing company consistency and the employees' involvement, articulating the company mission, and stimulating new ways of thinking to increase company adaptability towards the company's external environment, and the result remains consistent with LASRADO and KASSEM (2021) and SARROS et al. (2002).

Moreover, the result revealed that the transactional contingent rewards leadership style (TSLS\_CR) also has a significant contribution to shaping and enhancing company culture, and the result is consistent with SARROS et al. (2002). In contrast, the transactional contingent punishment leadership style (TSLS\_CP) showed a significant negative impact on the company's organizational culture. Accordingly, company leaders need to consider the impact of their behaviors and practices on the company culture. They need to adopt the best set of leadership styles to ensure strong consistency and employee involvement, a clear organizational mission, and foster an adaptable response towards the changes within and without the company. Overall, the result offers evidence to confirm the presence of a strong link between the leadership styles and the organizational culture.

- Organizational culture and organizational performance

The result revealed that organizational culture plays a significant role in enhancing an organization's performance, in which an organization's culture that ensures employee involvement and internal consistency, a clear mission, and a fast response and adaptability to external changes could have a significant impact on improving the organizational effectiveness (DENISON et al., 2003; DENISON and MISHRA, 1995) and employee retention (LEISANYANE and KHAOLA, 2013). The result showed that the organization's members' intention to leave is minimized when they perceive that their organization employs a consistent policy, encourages employees' involvement, clarifies its mission, and adopts new ideas in dealing with external change. The result remains consistent with LEISANYANE and

KHAOLA (2013). Along the same line, organizational effectiveness is maximized when a stable internal environment, collective efforts from every member within the organization, an attractive and well-established mission, and flexibility exist within the organization. The result remains consistent with DENISON et al. (2003)

In conclusion, organizational culture has a significant impact on company performance in several ways, in which a positive culture can foster employee engagement, encourage innovation and collaboration, improve employee retention, and enhance employees satisfaction and commitment, all of which can lead to better performance and significant improvement in the overall organizational success. Accordingly, it is a matter of necessity that an organization's leaders pay more attention to their organization's culture besides taking steps toward cultivating a positive, creative, and attractive culture within their organization that aligns and fits with the company's goals and values.

- Leadership styles and organizational performance

The result revealed that leadership styles significantly improve organizational performance by stimulating organizational effectiveness and reducing employee turnover. While the transformational leader inspires and motivates employees to achieve a common goal, leading to increased engagement, higher productivity, and better performance. The transactional leader focuses on rewarding or punishing employees for meeting predetermined goals and adhering to strict rules and procedures, leading to improved performance in the short term but may hinder long-term growth and innovation (IRFAN ULLAH KHAN et al., 2021).

The result indicated that TFLS significantly boosts organizational effectiveness and reduces employees' intention to quit. That is why leaders are required to rely more on TFLS to inspire, motivate, and foster their followers' performance and desire to stay. In connection to organizational performance, the result remains consistent with LASRADO and KASSEM (2021) and TOJARI et al. (2011). Furthermore, in connection to intention to quit, the result remains consistent with DEWI and MANSYUR (2022) and NTSEKE et al. (2022).

Likewise, the TSLS\_CR showed a positive impact on effectiveness and employee retention. The result remains consistent with SAEED and MUGHAL (2019) and AGA (2016) regarding organizational performance. However, it is reasonable to mention that the impact of TSLS\_CR is conditional, as leaders must respect their promises of rewarding those who perform outstanding performances. Concerning the intention to quit, the result remains consistent with LAULIÉ et al. (2021). However, a negative influence was raised when using TSLS\_CP, as that

type of leadership style relies more on adopting fear and obligatory practices to influence the employees' performance, which might reduce their satisfaction or commitment to perform well.

- The mediation effects of job satisfaction and organizational commitment

Employees' attitudes and behaviors of an organization are a mean to understand the essence of any organization, as they provide a clear view of how well the organization is. The result revealed that the insurance companies' employees' job satisfaction and commitment were high, which was reflected in the employees' rating of their organization's effectiveness, and their intentions to quit. Previous studies indicated that highly satisfied workers lead to a significant improvement in organizational effectiveness (ANDREW, 2017; BAKOTIĆ, 2016; ELIYANA et al., 2019) and a reduction in employees' turnover intention (AL-KILANI, 2017; GELENCŠÉR et al., 2023; LEISANYANE and KHAOLA, 2013). Furthermore, it has been reported that a positive culture and a supportive leadership style play a significant role in increasing employees' satisfaction with their job. Likewise, employees' job satisfaction is a predictor of their organizational commitment, which, in turn, will inspire their motivation to perform well and contribute to organizational success.

The result, as shown in Table 36, revealed that job satisfaction and organizational commitment play a significant role in explaining the relationships of INCO, Mis, and Adp cultural traits with the organizational performance measures, including Effs and ItQ. According to the findings, it is noticeable that the three cultural traits positively affect the insurance companies' members' job satisfaction and commitment, which in turn, the satisfied and committed employees will contribute significantly to enhance their companies' effectiveness and show less intention to leave.

Furthermore. the result showed that job satisfaction and organizational commitment play a significant role in explaining the relationships of TFLS and TSLS leadership styles with the organizational performance measures, including Effs and ItQ. According to the findings, it is observed that the TFLS and TSLS\_CR positively affect the insurance companies' members' job satisfaction and commitment, which, in turn, will contribute significantly to enhancing their companies' effectiveness and reducing their intention to leave.

Additionally, regarding organizational performance, the result remains consistent with HILTON et al. (2023) and ALROWWAD et al. (2020), and in connection to turnover intention, the result also remains consistent with SIEW (2017). However, TSLS\_CP showed that it has a negative impact on employees' job satisfaction and commitment, suggesting the need for implementing more positive leadership practices.

Table 36. Summary of job satisfaction and organizational commitment mediation effects

No.	Hypothesis	Result
H4	Job satisfaction and organizational commitment play a significant role in explaining the relationship between organizational culture traits and organizational performance	Accepted
H4-1	Job satisfaction and organizational commitment mediate the relationships between INCO trait and organizational performance	Accepted
H4-2	Job satisfaction and organizational commitment mediate the relationships between Mis trait and organizational performance	Accepted
H4-3	Job satisfaction and organizational commitment mediate the relationships between Adp trait and organizational performance	Accepted
H5	Job satisfaction and organizational commitment play a significant role in explaining the relationship between leadership styles and organizational performance	Accepted
H5-1	Job satisfaction and organizational commitment mediate the relationships between TFLS and organizational performance	Accepted
H5-2	Job satisfaction and organizational commitment mediate the relationships between TSLS and organizational performance	Partially accepted
H5-2-a	Job satisfaction and organizational commitment mediate the relationships between TSLS_CR and organizational performance	Accepted
H5-2-b	Job satisfaction and organizational commitment mediate the relationships between TSLS_CP and organizational performance	Not applicable

## 5.2 Recommendations

The results of the current study show a strong relationship between organizational culture and leadership styles, which may be thought of as the two sides of the same coin. Therefore, it is a matter of high importance for an organization to maintain the best fit between its organizational culture and the leadership styles that are employed within it. The result indicated that leadership styles are a prominent predictor of an organization's culture, which is consistent with the functionalist view of leadership, as a leader is regarded as a maestro or draftsman of cultural evolution by their substantive acts and practices.

This role emerges during the organization's start-up phase or as a result of leaders' responses to internal and external adaptation, when an organization's founders or leaders outline the organizational culture based on their beliefs, values, strategies, visions, and different ways of doing things. Hence, the study recommended that leaders who want to create competitive and cooperative organizational cultures are required to elevate employees' expectations and attitudes about long-term goals and guide their followers in achieving these goals by picking a set of leadership practices that reflects their dedication and passion for developing these creative and high-achieving cultures.

Based on the findings of the study, it is recommended that insurance companies should focus on developing and maintaining a positive organizational culture that emphasizes the cultural traits highlighted in the study: INCO, Mis and Adp. By doing so, insurance companies can

foster job satisfaction and organizational commitment among their employees, which are critical factors in enhancing organizational performance measures, such as effectiveness and employees' intention to stay. To develop a positive organizational culture, insurance companies should ensure that their policies, procedures, and practices align with the cultural traits identified in the study. Additionally, managers and leaders within the organization should model the desired cultural traits and create an environment that supports and reinforces them.

Moreover, insurance companies can use the findings to design training and development programs that promote and reinforce the desired cultural traits. By investing in the professional development of their employees, companies can create a culture that supports continuous improvement, innovation, and growth. Overall, the study highlights the importance of organizational culture in enhancing organizational performance measures, including the Effs and employees' ItQ. Therefore, it is recommended that insurance companies take steps to develop and maintain a positive organizational culture that promotes job satisfaction and organizational commitment among employees.

The result also recommended that insurance companies required to develop and promote TFLS and TSLS\_CR leadership styles. These leadership styles have been found to positively affect job satisfaction and organizational commitment among employees, which, in turn, will contribute to stimulating organizational effectiveness and employees' intention to stay. To develop TFLS and TSLS styles, insurance companies should invest in leadership development programs that focus on developing the necessary skills and competencies for these leadership styles. Additionally, companies can use the findings of this study to design training and development programs for managers and leaders that promote the dimensions of transformational and contingent reward transactional styles.

Furthermore, insurance companies can use the findings of this study to design performance management systems that align with the desired leadership styles. These systems should include performance metrics that measure the anticipated leadership behaviors and act accordingly. Overall, the study findings highlight the importance of transformational and transactional leadership styles in improving organizational effectiveness and reducing employees' intention to quit. Therefore, it is recommended that insurance companies take steps to develop and promote these leadership styles through leadership development programs, training and development programs for managers and leaders, and performance management systems.

### **5.3 Study limitations and future research directions**

Like other studies, the current study had several limitations that should be acknowledge.

Firstly, the study scope is limited to the Jordanian insurance sector. Therefore, the findings may not be generalizable to other countries or industries. Factors such as cultural, economic, and regulatory contexts could have a diverse impact on the results. Thus, future research should consider expanding the study to include similar industries and conducting comparative analyses across various business sectors to examine the influence of cultural traits and leadership styles on organizational performance.

Secondly, the study employed self-reported questionnaires to gather information on all measures, in which the only source from which data was gathered to test the hypotheses was employees. Therefore, the observed relationships may have been exaggerated and subject to common-method bias. Consequently, for future research, it is recommended to involve several data collection techniques and rely on different data sources to reduce such a source of method bias.

Thirdly, the research employed a cross-sectional design, which made it impossible to establish a causal relationship between the study variables. While the findings revealed connections between the variables, it is not sufficient to make any definitive statements regarding the direction of causality, as inferred directions of the perceived relationships were based on theoretical foundations rather than direct evidence obtained from the collected data. Therefore, to establish a better explanation of the causal inferences among the research variables, it is suggested that future research should employ a longitudinal study design to assess the strength and consistency of the relationships under investigation over an extended period.

Fourthly, the study utilized subjective performance measures and relied on employees' perceptions in evaluating the research variables, which, in turn, might be misleading or overestimating and limit the robust conclusions. Thus, it is more deserving that future research utilizes other objective measures and compares the consistency of the relationships and associations among the variables under investigation.

Finally, the study has adopted and translated a Western research instrument, which raised several challenges when applying it in a non-Western context. Thus, it is advised that future researchers develop and validate suitable research instruments that fit with their research context.

## 6. NOVEL FINDING

The dissertation main objective was to empirically investigate the links between the employed leadership styles of insurance companies leaders and the organizational culture of Jordanian insurance companies and assessing the impacts of leaders leadership styles and the cultural traits impact on the performance and employees attitudes within the companies under investigation. The study treated the employees performance indicators JS and Ocm as mediators of the leadership styles and cultural traits links with the organizational performance, including effectiveness and employees intention to quit.

The new outcome of this dissertation mainly appeared by its contribution to the body of knowledge by evaluating the applicability of Western theories and testing a theoretical model within a non-Western context, precisely, the Jordanian context. The dissertation proves the applicability of the proposed theories and model in a different context by offering empirical support that links the research variables in such a model in this way, which has not been tested before. The novel findings of this study can be illustrated through three-level involving the research topic, study design, and the study findings, which can be summarized as follows:

- The novelty of the research topic is attributed to the scarcity of empirical results that examine the relationships among the research variables within the Jordanian insurance sector. Although the links between organizational culture and leadership styles with organizational performance are firmly established, in Western culture, still, there is a need to know whether or not the other part of the world behaves similarly. The study is one of the first empirical research used a sample of Jordanian insurance companies to test the links among the research variables.
- The study design novelty emerges through; the applicability of a strong methodological approach in new context; using a mixture of survey items in exploring the complex relationships among the research variables; and the steps undertaken to choose the study sample, and research instrument reliability and validity evaluation. The undertaken steps were used to improve the study's statistical conclusion validity. Statistical conclusion validity refers to the ability to draw conclusions based on statistical evidence of covariation and prediction. It concerns more with the sources of error that increase variability and the usage of a suitable statistical tests to handle such errors. The study applied a subsequence approach to support the study conclusions, including forward-backward translation, the EFA and CFA analysis, correlations and path analysis, and mediation analysis in the evaluation of the relations among the study variables.

- The research findings' novelty arises from the absence of previous studies that empirically examine the association between organizational culture traits, leadership styles, job satisfaction, organizational commitment, and organizational performance by evaluating the effectiveness and employees' intention to quit among the Jordanian insurance companies. The novel research findings of the research problem are demonstrated as follows:

1<sup>st</sup> – In terms of leadership styles and organizational culture traits relationships, the novel findings indicate that the TFLS and the TSLS leadership styles significantly contribute to better organizational culture traits, including INCO, Mis, and Adp cultural traits, which means that the more perceived transformational and transactional styles, the more innovative, creative, adaptable, and attractive mission culture is perceived within the organization. The leadership styles empirically prove that it is accountable for cultural evolution and articulating as consistent with the functionalist view of leadership.

2<sup>ed</sup> – The leadership styles and organizational culture links with organizational performance are empirically proven, as both constructs significantly influence insurance companies' effectiveness and employees' intention to quit. The novelty findings are that both TFLS and TSLS\_CR leadership styles and the three cultural traits (INCO, Mis and Adp) have a significant contribution to enhancing the effectiveness and minimizing the employees' intention to quit. Besides, the TSLS\_CP was accountable for the negative impact on the insurance companies' performance.

3<sup>rd</sup> – The novelty findings also appear when considering the role of the employees' job satisfaction and commitment towards their organization in explaining the links among the leadership styles, cultural traits, and organizational performance. The findings revealed that the much satisfied and committed members perceived sufficiently good relations with their managers within a healthy cultural context, which, in turn, significantly reflected in their performance and intention to keep their membership with the organization, resulting in continuous improvement in the organizational effectiveness and employees' retention.

Briefly, the study contributes to the body of knowledge about organizational behavior within a non-Western context by providing an empirical finding of the existing situation of the organizational culture and the leadership styles impact on Jordanian insurance companies' organizational performance and how employees' attitudes indicators explain the links among the variables under investigation.

## **SUMMARY**

The study aimed to investigate the connections between organizational culture, leadership styles, and their effects on organizational performance. To achieve this, the Jordanian insurance sector was selected as a sample. The research sought to answer questions about the relationships between organizational culture and leadership styles, and their potential impact on organizational performance. To meet these objectives, the study proceeded by exploring the links between two leadership styles (TFLS and TSLs) and various organizational culture traits (INCO, Mis, and Adp). The next step was to examine how each leadership style and organizational culture trait related to organizational performance measures, including Effs and employees' ItQ. Moreover, examining job satisfaction and organizational commitment of insurance employees role in mediating the leadership styles and organizational culture links with organizational performance.

The dissertation composes seven chapters preceded by the introduction section, which explains the specific boundaries of the research topic, highlights the research gaps, and discusses the theoretical and practical importance of the subject under consideration.

Chapter 1 discusses the main topic of the dissertation, in which the current study aims and objectives are declared, besides, providing a rationale justification of the study contribution to the organizational behaviors knowledge

Chapter 2 presents a comprehensive review of the existing literature, which covers topics such as organizational culture and its measurement, the evolution theory of leadership styles, and organizational performance. Further, the chapter discusses the performance indicators, including job satisfaction and organizational commitment.

Chapter 3 focuses on developing the research hypotheses related to the relationships among the research variables, in which organizational culture and leadership styles links were addressed, along with their impacts on organizational performance. Besides, the role of job satisfaction and organizational commitment in explaining the cultural traits and leadership styles' relationships with organizational performance were presented.

Chapter 4 outlines the materials and methods used for the research study, including the research context, sampling plan and data collection process, research instrument, translation process, and the statistical method employed to test the research hypotheses. The primary data was obtained from a 15-insurance company operated in Jordan with 328 avid responses for analysis,

in which respondents' perceptions about the research variables were gathered by a self-administrated questionnaire.

Chapter 5 presents the data analysis and the result findings of the study, including data analysis, demographic profiles of the sample, research instrument reliability and validity, research measures descriptive results, and the path analysis and hypotheses testing results. Correlation analysis and SEM approaches were used to test the relationships among the research variables. The result interpretation was illustrated via Tables and Figures. Briefly, the results revealed that significant relations existed between cultural traits and organizational leadership styles, and both constructs significantly influenced organizational performance. Besides, the result showed that job satisfaction and organizational commitment mediate those relationships.

Finally, Chapter 6 concludes the dissertation result and provides recommendations based on the research findings. Also, the study limitations and future research directions were presented. While Section 7 highlights the significant and novel findings that emerged from the study.

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2. **Abujudeh, S. A. M.**: Examining the impacts of organizational culture and leadership styles on the organizational performance indicators.  
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3. **Abujudeh, S. A. M.**: The role of human resource management in employees' job satisfaction and organizational commitment.  
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## Appendix A. Research instrument

Dear Sir/Madam,

You are kindly requested to respond to the statements of this survey. Your responses are of a great importance, as this survey is conducted as part of an Ph.D. Research Project, which shall be submitted in part completion of the Ph.D. of management and business degree from the University of Debrecen – Hungary. The researcher therefore values your cooperation to the fullest.

The general purpose of this study is to examine the diversity of organization culture and leadership style and their impacts on organizational commitment, job satisfaction, and organizational performance.

I would like to invite your participation in this survey by filling up the attached questionnaire. Your participation in this survey is **voluntary** and your input is **anonymous**. The questionnaire is constructed in a straightforward manner and easy to answer, which shouldn't take more than 15 minutes of your valuable time.

There is no right or wrong answer to any question. The researcher is only interested in your personal opinions. The “right” answer to any question is your frank and truthful response.

Please be assured that all information will be treated with **the strictest confidentiality** and **only the aggregate data** will be analyzed for **research purposes**.

Thank you for your valuable assistance in participating in the survey.

Best regards

Said Abujudeh. Ph.D. student <a href="mailto:saidabujudeh@gmail.com">saidabujudeh@gmail.com</a> Károly Ihrig Doctoral School of Management and Business University of Debrecen – Hungary	Supervised by, Dr. Andrea Matkó. Károly Ihrig Doctoral School of Management and Business University of Debrecen – Hungary.
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## 2- Organizational culture

Considering your current organization or company, please mark the relevant opinion of your level of agreement for each statement, as the response choices are scored as

1= Strongly disagree, 2= Disagree, 3=Neutral, 4= Agree, 5= Strongly agree.

Organizational culture <b>Involvement index</b>						
	Empowerment	SD	D	N	A	SA
1.	Decisions are usually made at the level where the best information is available	1	2	3	4	5
2.	Information is widely shared so that everyone can get the information he or she needs when it's needed.	1	2	3	4	5
3	Everyone believes that he or she can have a positive impact.	1	2	3	4	5
	Team Orientation	SD	D	N	A	SA
1.	Working in this organization is like being part of a team.	1	2	3	4	5
2.	This organization relies on horizontal control and coordination to get work done, rather than hierarchy	1	2	3	4	5
3.	Teams are our primary building blocks of this organization.	1	2	3	4	5
	Capability Development	SD	D	N	A	SA
1.	This organization is constantly improving compared with its competitors in many dimensions	1	2	3	4	5
2.	This organization continuously invests in the skills of employees.	1	2	3	4	5
3.	The capability of people in this organization is viewed as an important source of competitive advantage	1	2	3	4	5

Organizational culture <b>Consistency index</b>						
	Core Values	SD	D	N	A	SA
1.	The leaders and managers follow the guidelines that they set for the rest of the organization	1	2	3	4	5
2.	There is a clear and consistent set of values in this organization that governs the way we do business.	1	2	3	4	5
3.	This organization has an ethical code that guides our behavior and tells us right from wrong	1	2	3	4	5
	Agreement	SD	D	N	A	SA
1.	When disagreements occur, we work hard to achieve solutions that benefit both parties in the disagreement.	1	2	3	4	5
2.	It is easy to reach consensus, even on difficult issues.	1	2	3	4	5
3.	We often have trouble reaching agreement on key issues. *	1	2	3	4	5
	Coordination & Integration	SD	D	N	A	SA
1.	People from different parts of the organization share a common perspective.	1	2	3	4	5
2.	It is easy to coordinate projects across functional units in this organization	1	2	3	4	5
3.	There is good alignment of goals across levels of this organization.	1	2	3	4	5

1= Strongly disagree, 2= Disagree, 3=Neutral, 4= Agree, 5= Strongly agree.

Organizational culture Adaptability index						
	Creating Change	SD	D	N	A	SA
1.	This organization is very responsive and changes easily.	1	2	3	4	5
2.	This organization responds well to competitors and other changes in the business environment.	1	2	3	4	5
3.	This organization continually adopts new and improved ways to do work	1	2	3	4	5
	Customer Focus	SD	D	N	A	SA
1.	Customer comments and recommendations often lead to changes in this organization	1	2	3	4	5
2.	Customer input directly influences our decisions.	1	2	3	4	5
3.	The interests of the customer often get ignored in our decisions. *	1	2	3	4	5
	Organizational Learning	SD	D	N	A	SA
1.	We view failure as an opportunity for learning and improvement	1	2	3	4	5
2.	This organization encourages and rewards those who take risk	1	2	3	4	5
3.	We make certain that we coordinate our actions and efforts between different units in this organization	1	2	3	4	5

Organizational culture Mission index						
	Strategic Direction & Intent	SD	D	N	A	SA
1.	This organization has long-term purpose and direction.	1	2	3	4	5
2.	This organization has a clear mission that gives meaning and direction to our work.	1	2	3	4	5
3.	This organization has a clear strategy for the future.	1	2	3	4	5
	Goals & Objectives	SD	D	N	A	SA
1.	There is widespread agreement about goals of this organization	1	2	3	4	5
2.	Leaders of this organization set goals that are ambitious, but realistic.	1	2	3	4	5
3.	The leadership has clearly stated the objectives we are trying to meet.	1	2	3	4	5
	Vision	SD	D	N	A	SA
1.	We have a shared vision of what the organization will be like in the future.	1	2	3	4	5
2.	Leaders of this organization have a long-term orientation,	1	2	3	4	5
3.	Our vision creates excitement and motivation for our employees.	1	2	3	4	5

### 3- Leadership style

Considering your direct leader, manager, or supervisor at work, please mark the relevant option about each statement as the response choices are scored as

1=Never, 2= Rarely, 3= Sometimes, 4= Often, 5= Always.

All statements start with “my direct leader/ my direct manager/ my direct supervisor “

	<b>Transformational leadership</b>	N	R	S	O	A
1.	communicates a clear and positive vision of the future	1	2	3	4	5
2.	treats staff as individuals, supports and encourages their development	1	2	3	4	5
3.	gives encouragement and recognition to staff	1	2	3	4	5
4.	fosters trust, involvement, and cooperation among team members	1	2	3	4	5
5.	encourages thinking about problems in new ways and questions assumptions	1	2	3	4	5
6.	is clear about his/her values and practices what he/she preaches	1	2	3	4	5
7.	instils pride and respect in others and inspires me by being highly competent	1	2	3	4	5

	<b>Transactional leadership</b>	N	R	S	O	A
1.	always gives me positive feedback when I perform well	1	2	3	4	5
2.	gives me special recognition when I produce at a high level	1	2	3	4	5
3.	commends me when I exceed my productivity goals	1	2	3	4	5
4.	frequently does not acknowledge my good performance *	1	2	3	4	5
5.	would indicate his or her disapproval if I performed at a low level	1	2	3	4	5
6.	lets me know about it when I perform poorly	1	2	3	4	5
7.	points it out to me when my productivity is not up to par	1	2	3	4	5

### 4- Job satisfaction

With reference to your current job, please mark the relevant option that represents your degree of agreement for each statement as the response choices are scored as

1= Strongly dissatisfied, 2= Dissatisfied, 3= Neutral, 4= satisfied, 5= Strongly satisfied.

	<b>Job satisfaction based on</b> (Andrews & Withey, 2012; Rentsch & Steel, 1992)	SD	D	N	S	SS
1	How do you feel about your job?	1	2	3	4	5
2	How do you feel about the people you work with -- your co-workers?	1	2	3	4	5
3	How do you feel about the work you do on your job -- the work itself?	1	2	3	4	5
4	What is it like where you work - the physical surroundings, the hours, and the amount of work you are asked to do?	1	2	3	4	5
5	How do you feel about what you have available for doing your job --I mean equipment, information, good supervision, and so on?	1	2	3	4	5
6	How do you feel about the wages and other financial benefits you receive for your rise? your work?	1	2	3	4	5

## 5- Organizational commitment

Considering your current organization, please mark the relevant option that represents your degree of agreement for each statements the response choices are scored as

(1= Strongly disagree, 4=Neutral, 7=Strongly agree)

	<b>Commitment</b>	SD	D	N	A	SA
1.	To what extent you are committed to your current employer?	1	2	3	4	5
2.	To what extent do you care about your current employer?	1	2	3	4	5
3.	To what extent you are dedicated to your current employer?	1	2	3	4	5
4.	To what extent have you chosen to be committed to your current employer?	1	2	3	4	5
5.	To what extent you are attached to your current employer?	1	2	3	4	5

## 6- Organizational performance - effectiveness and operational performance

### *About Effectiveness*

Comparing your company with other competitors in the industry for last three years, how would you assess your company effectiveness in the following areas? Please mark one response per item.

	<b>EFFECTIVENESS</b>	Very low	low	average	high	Very high
1	Sales Growth	1	1	4	5	6
2	Profitability	1	1	4	5	6
3	Market share	1	1	4	5	6
4	Employee overall Satisfaction	1	1	4	5	6
5	Overall Performance	1	1	4	5	6
6	Quality of Products and Services	1	1	4	5	6
7	Service and products development – innovations	1	1	4	5	6

### *Intention to quit*

Considering your work at the current organization, please mark the relevant opinion of your level of agreement for each statement, as the response choices are scored as

1= Strongly disagree, 2= Disagree, 3=Neutral, 4= Agree, 5= Strongly agree.

	<b>Intention to quit</b>	SD	D	N	A	SA
1.	I don't have a strong desire to continue working in this company for a long time.	1	2	3	4	5
2.	I have plans to look for a new job during the next year.	1	2	3	4	5
3.	If I could choose again, I would not be happy to choose to work in this company	1	2	3	4	5

## Appendix B. Statistical result

- Univariate descriptive analysis result

### Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Inv1	328	3.77	.945	-.930	.135	.943	.268
Inv2	328	3.65	1.018	-.831	.135	.285	.268
Inv3	328	3.29	1.007	-.378	.135	-.385	.268
Inv4	328	3.76	1.137	-.905	.135	.153	.268
Inv5	328	3.51	1.157	-.606	.135	-.428	.268
Inv6	328	3.65	1.047	-.876	.135	.373	.268
Inv7	328	3.81	1.139	-.985	.135	.389	.268
Inv8	328	3.54	1.178	-.608	.135	-.525	.268
Inv9	328	3.64	1.183	-.715	.135	-.347	.268
Con1	328	3.62	1.028	-.663	.135	.000	.268
Con2	328	3.62	1.031	-.719	.135	.007	.268
Con3	328	3.80	1.013	-1.039	.135	.959	.268
Con4	328	3.63	1.073	-.897	.135	.378	.268
Con5	328	3.50	1.035	-.625	.135	-.114	.268
Con6	328	3.48	1.001	-.567	.135	-.151	.268
Con7	328	3.35	.926	-.311	.135	-.315	.268
Con8	328	3.53	1.010	-.665	.135	.150	.268
Con9	328	3.59	.988	-.686	.135	.233	.268
Adp1	328	3.55	1.009	-.601	.135	-.037	.268
Adp2	328	3.75	.956	-.713	.135	.133	.268
Adp3	328	3.76	.980	-.836	.135	.298	.268
Adp4	328	3.55	1.012	-.604	.135	-.113	.268
Adp5	328	3.45	1.021	-.457	.135	-.331	.268
Adp6	328	3.47	1.138	-.581	.135	-.447	.268
Adp7	328	3.60	1.067	-.569	.135	-.242	.268
Adp8	328	3.39	1.103	-.468	.135	-.549	.268
Adp9	328	3.78	.993	-.945	.135	.605	.268
Mis1	328	3.80	1.060	-.809	.135	.045	.268
Mis2	328	3.76	.995	-.868	.135	.466	.268
Mis3	328	3.76	1.094	-.842	.135	.066	.268
Mis4	328	3.68	1.022	-.771	.135	.133	.268
Mis5	328	3.72	1.016	-.794	.135	.197	.268
Mis6	328	3.67	1.011	-.884	.135	.496	.268
Mis7	328	3.54	1.019	-.527	.135	-.331	.268
Mis8	328	3.70	1.072	-.733	.135	-.099	.268
Mis9	328	3.41	1.124	-.465	.135	-.523	.268

TFLS1	328	3.70	1.090	-.732	.135	-.027	.268
TFLS2	328	3.60	1.107	-.652	.135	-.223	.268
TFLS3	328	3.69	1.130	-.701	.135	-.246	.268
TFLS4	328	3.70	1.104	-.726	.135	-.063	.268
TFLS5	328	3.68	1.086	-.800	.135	.053	.268
TFLS6	328	3.70	1.105	-.714	.135	-.193	.268
TFLS7	328	3.57	1.187	-.680	.135	-.312	.268
TSLS1	328	3.75	1.077	-.634	.135	-.262	.268
TSLS2	328	3.66	1.249	-.735	.135	-.433	.268
TSLS3	328	3.19	1.269	-.257	.135	-.982	.268
TSLS4	328	3.55	1.129	-.514	.135	-.471	.268
TSLS5	328	2.94	1.345	-.083	.135	-1.178	.268
TSLS6	328	3.59	1.022	-.405	.135	-.385	.268
TSLS7	328	3.67	1.117	-.693	.135	-.155	.268
Js1	328	3.66	1.105	-.749	.135	.031	.268
Js2	328	3.84	1.010	-1.056	.135	1.083	.268
Js3	328	3.88	1.089	-.993	.135	.515	.268
Js4	328	3.66	1.147	-.667	.135	-.270	.268
Js5	328	3.75	1.040	-.724	.135	.144	.268
Js6	328	3.04	1.300	-.133	.135	-1.117	.268
Ocm1	328	4.12	.980	-1.200	.135	1.175	.268
Ocm2	328	4.03	.993	-1.317	.135	1.792	.268
Ocm3	328	4.08	.975	-1.228	.135	1.539	.268
Ocm4	328	4.15	.938	-1.264	.135	1.668	.268
Ocm5	328	4.14	1.003	-1.212	.135	1.111	.268
Effs1	328	3.60	.886	-.517	.135	.462	.268
Effs2	328	3.64	.925	-.524	.135	.327	.268
Effs3	328	3.62	.921	-.519	.135	.434	.268
Effs4	328	3.41	.911	-.517	.135	.276	.268
Effs5	328	3.56	.840	-.655	.135	.967	.268
Effs6	328	3.65	.917	-.543	.135	.525	.268
Effs7	328	3.57	.974	-.359	.135	-.154	.268
ItQ1	328	2.16	1.167	.694	.135	-.570	.268
ItQ2	328	2.37	1.323	.541	.135	-.931	.268
ItQ3	328	2.17	1.158	.697	.135	-.410	.268
Valid N (listwise)	328						

- Correlation matrix of involvement -consistency EFA

Correlation Matrix<sup>a</sup>

	Inv1	Inv2	Inv3	Inv4	Inv5	Inv6	Inv7	Inv8	Inv9	Con6	Con7	Con8	Con1	Con2	Con3	Con4	Con5	Con9
Inv1	1.000																	
Inv2	0.556																	
Inv3	0.552	0.536	1.000															
Inv4	0.597	0.595	0.637	1.000														
Inv5	0.552	0.518	0.543	<b>0.718</b>	1.000													
Inv6	0.590	0.568	0.610	<b>0.751</b>	0.679	1.000												
Inv7	0.602	0.563	0.536	<b>0.706</b>	0.607	0.683	1.000											
Inv8	0.539	0.543	0.545	0.644	0.598	0.643	<b>0.726</b>	1.000										
Inv9	0.571	0.570	0.582	0.693	0.624	0.673	<b>0.707</b>	<b>0.737</b>	1.000									
Con6	0.500	0.446	0.425	0.513	0.508	0.552	0.513	0.532	0.479	1.000								
Con7	0.487	0.497	0.516	0.526	0.546	0.580	0.506	0.553	0.513	0.542	1.000							
Con8	0.497	0.465	0.483	0.585	0.570	0.587	0.561	0.535	0.569	0.501	0.639	1.000						
Con1	0.581	0.629	0.533	0.669	0.603	0.633	0.620	0.624	0.663	0.554	0.562	0.600	1.000					
Con2	0.592	0.549	0.605	0.654	0.581	0.659	0.650	0.607	0.684	0.478	0.560	0.610	0.697	1.000				
Con3	0.530	0.503	0.478	0.653	0.522	0.628	0.621	0.597	0.645	0.470	0.504	0.573	0.663	<b>0.725</b>	1.000			
Con4	0.601	0.517	0.527	0.683	0.681	0.648	0.618	0.617	0.656	0.562	0.564	0.580	0.665	0.666	0.668	1.000		
Con5	0.558	0.512	0.464	0.644	0.618	0.612	0.596	0.559	0.637	0.598	0.504	0.585	0.659	0.611	0.620	<b>0.714</b>	1.000	
Con9	0.523	0.561	0.574	0.669	0.625	0.677	0.638	0.629	0.667	0.548	0.664	<b>0.751</b>	<b>0.700</b>	<b>0.719</b>	0.672	0.629	0.665	1.000

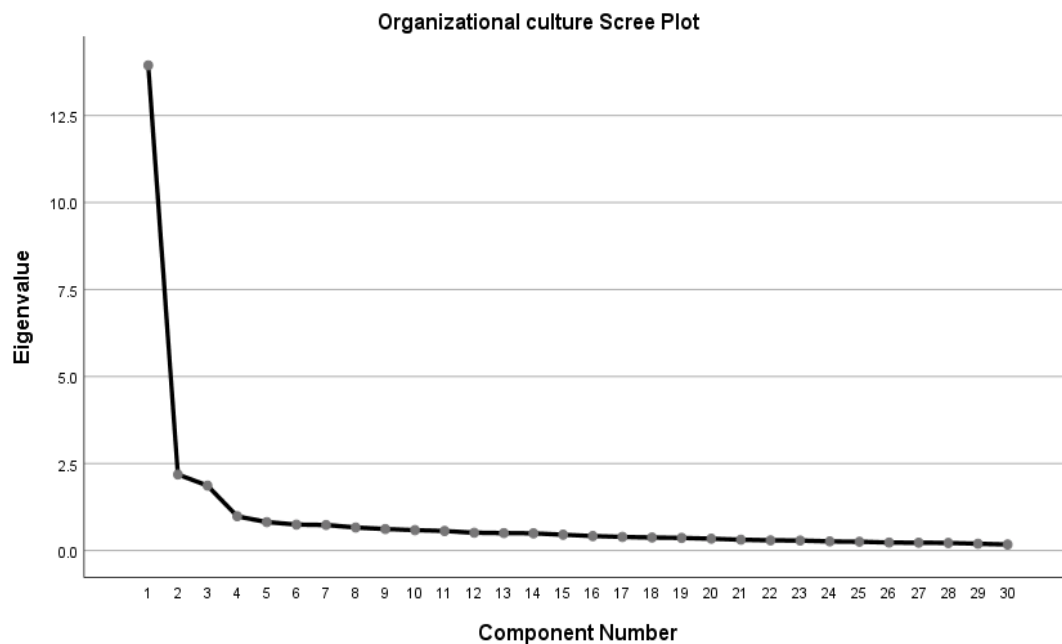
- EFA for involvement- consistency culture traits.

### Total Variance Explained

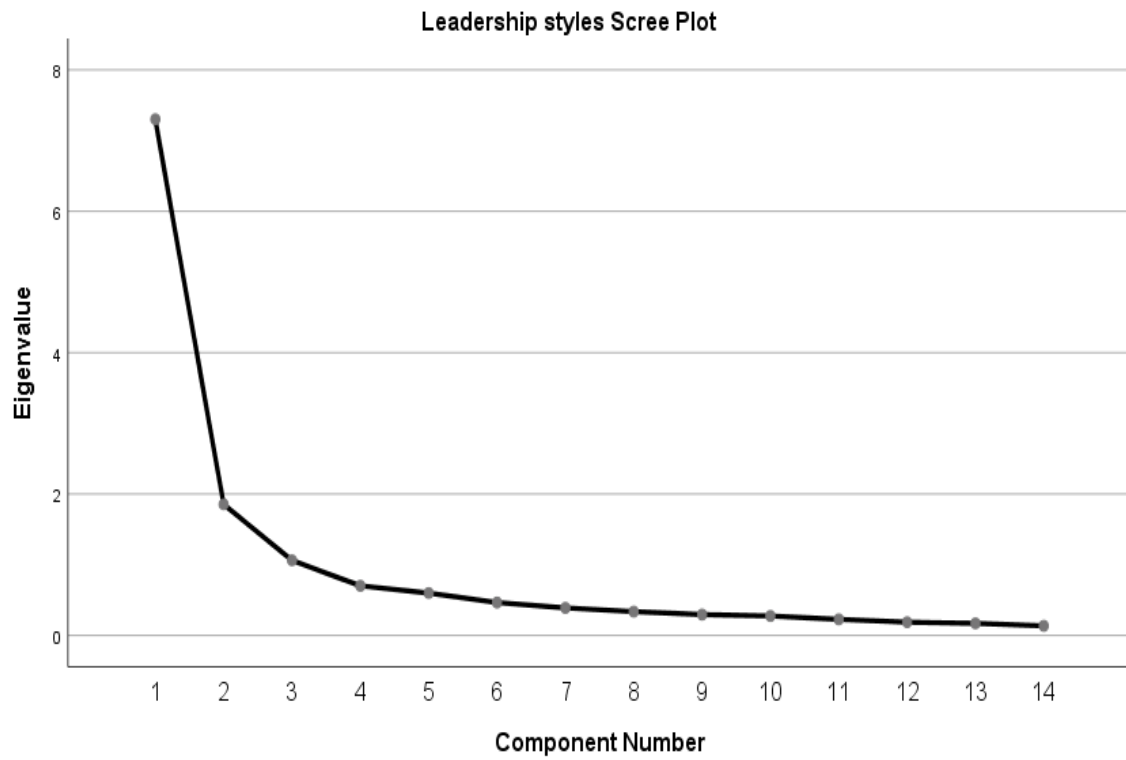
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	<b>11.131</b>	<b>61.837</b>	<b>61.837</b>	<b>11.131</b>	<b>61.837</b>	<b>61.837</b>
2	.792	4.401	66.238			
3	.679	3.773	70.011			
4	.660	3.666	73.677			
5	.572	3.177	76.855			
6	.541	3.005	79.859			
7	.477	2.650	82.509			
8	.430	2.389	84.898			
9	.385	2.141	87.039			
10	.372	2.066	89.105			
11	.308	1.710	90.814			
12	.278	1.546	92.361			
13	.266	1.477	93.838			
14	.264	1.465	95.303			
15	.239	1.328	96.631			
16	.224	1.245	97.876			
17	.194	1.076	98.952			
18	.189	1.048	100.000			

Extraction Method: Principal Component Analysis.

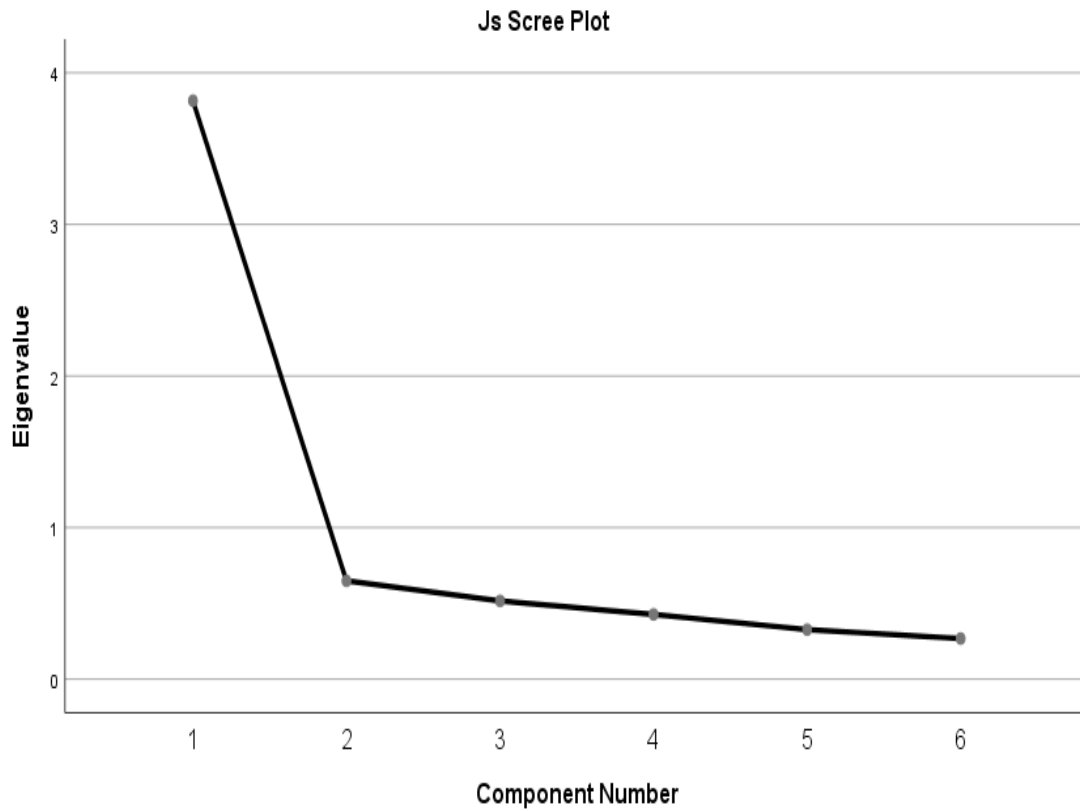
- EFA – Scree plot for organizational culture measure 2ed run.



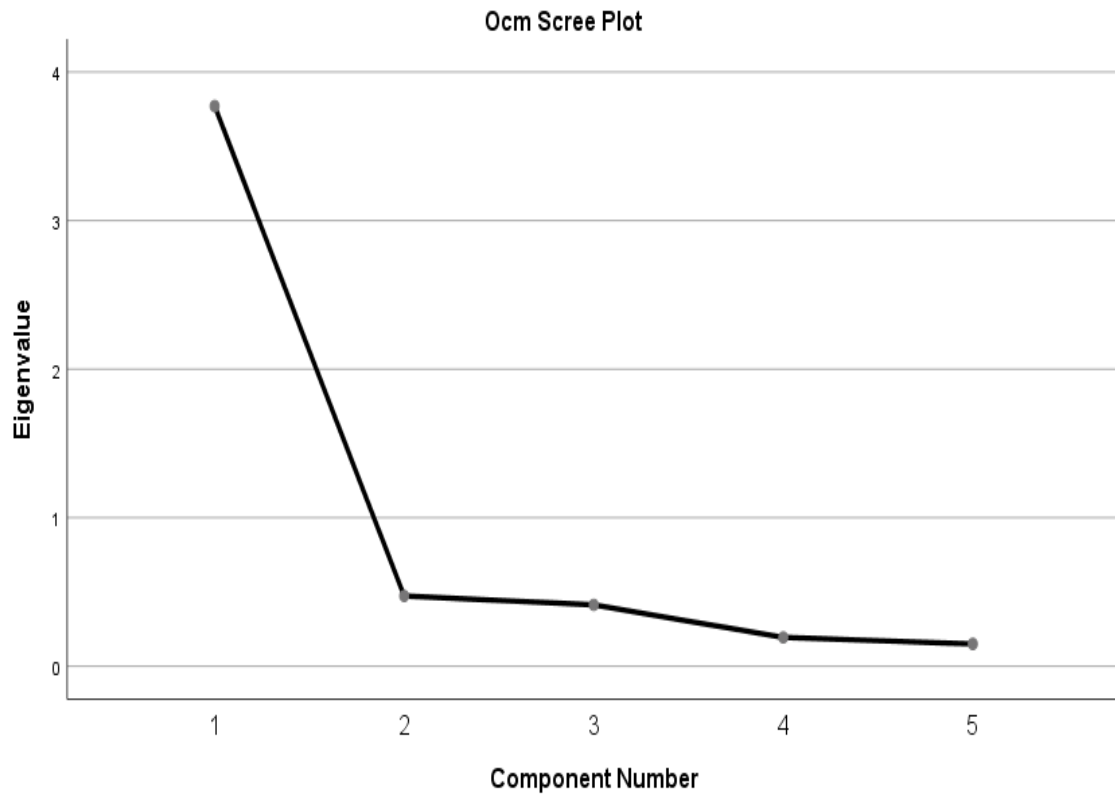
- EFA – Scree plot for leadership styles measure



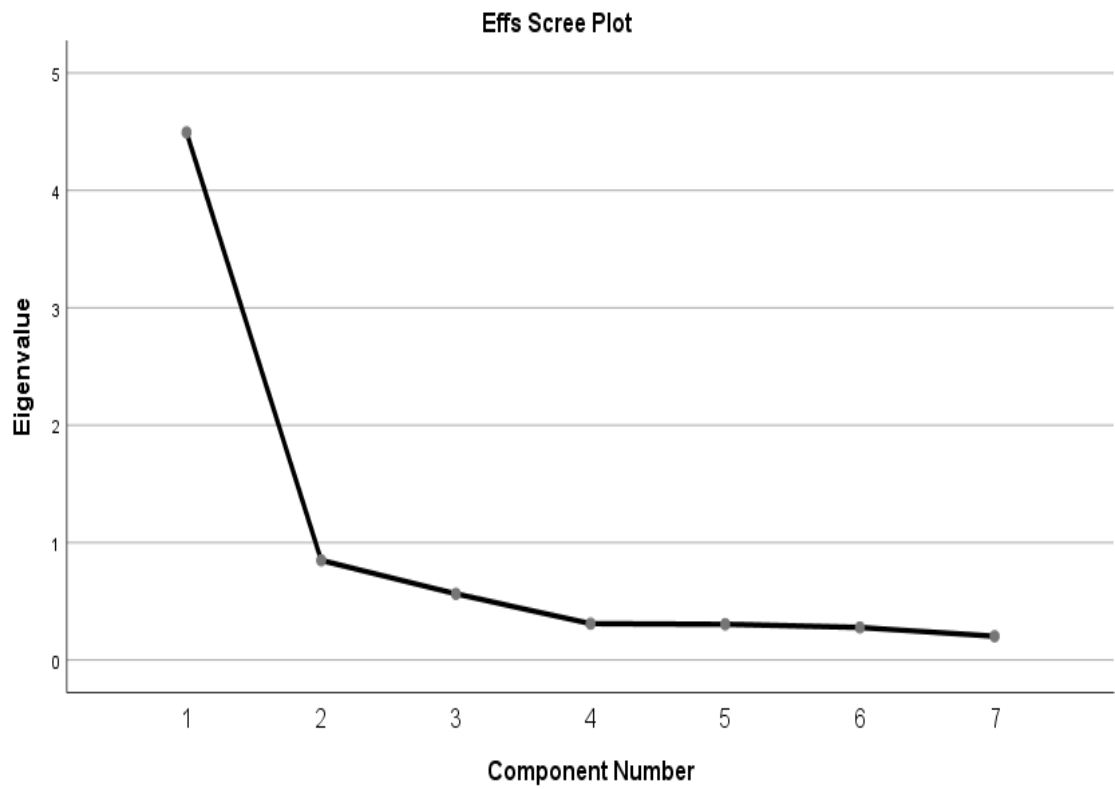
- EFA – Scree plot for Job satisfaction measure.



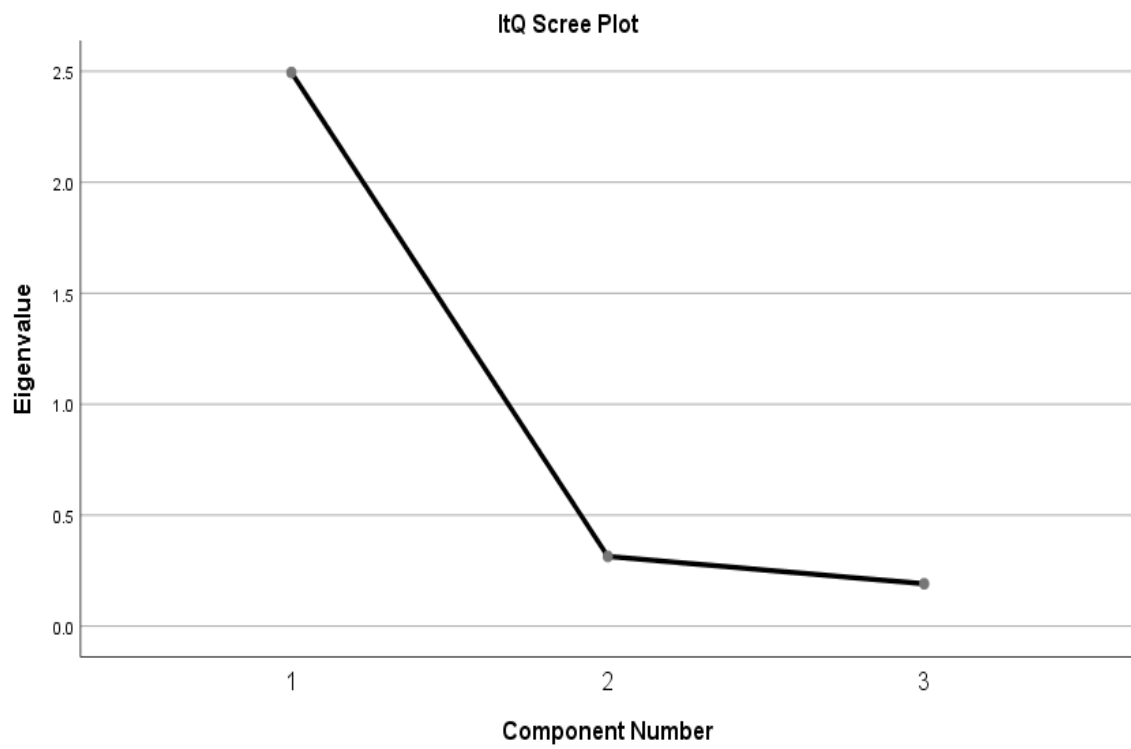
- EFA – Scree plot for organizational commitment measure.



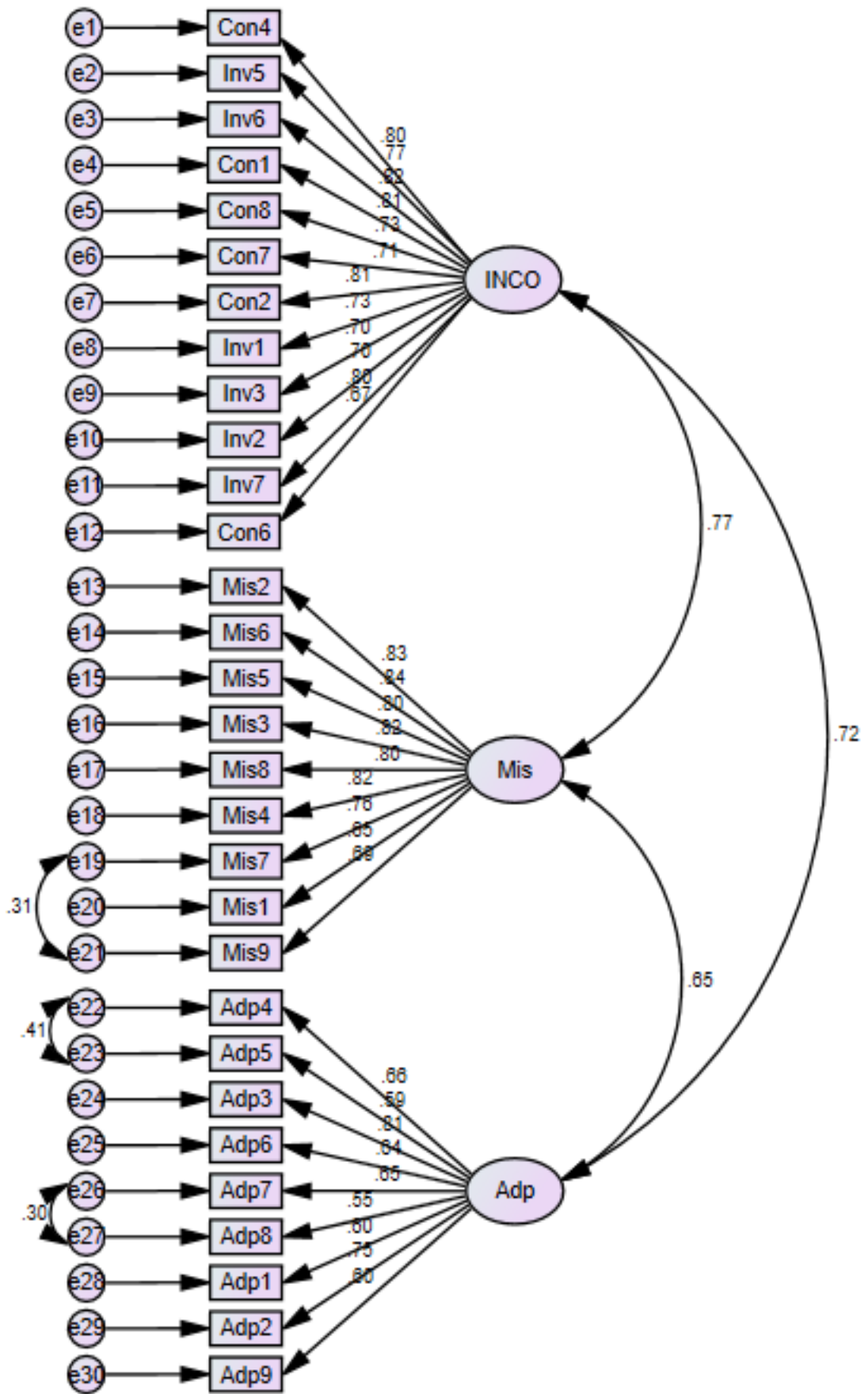
- EFA – Scree plot for effectiveness measure.



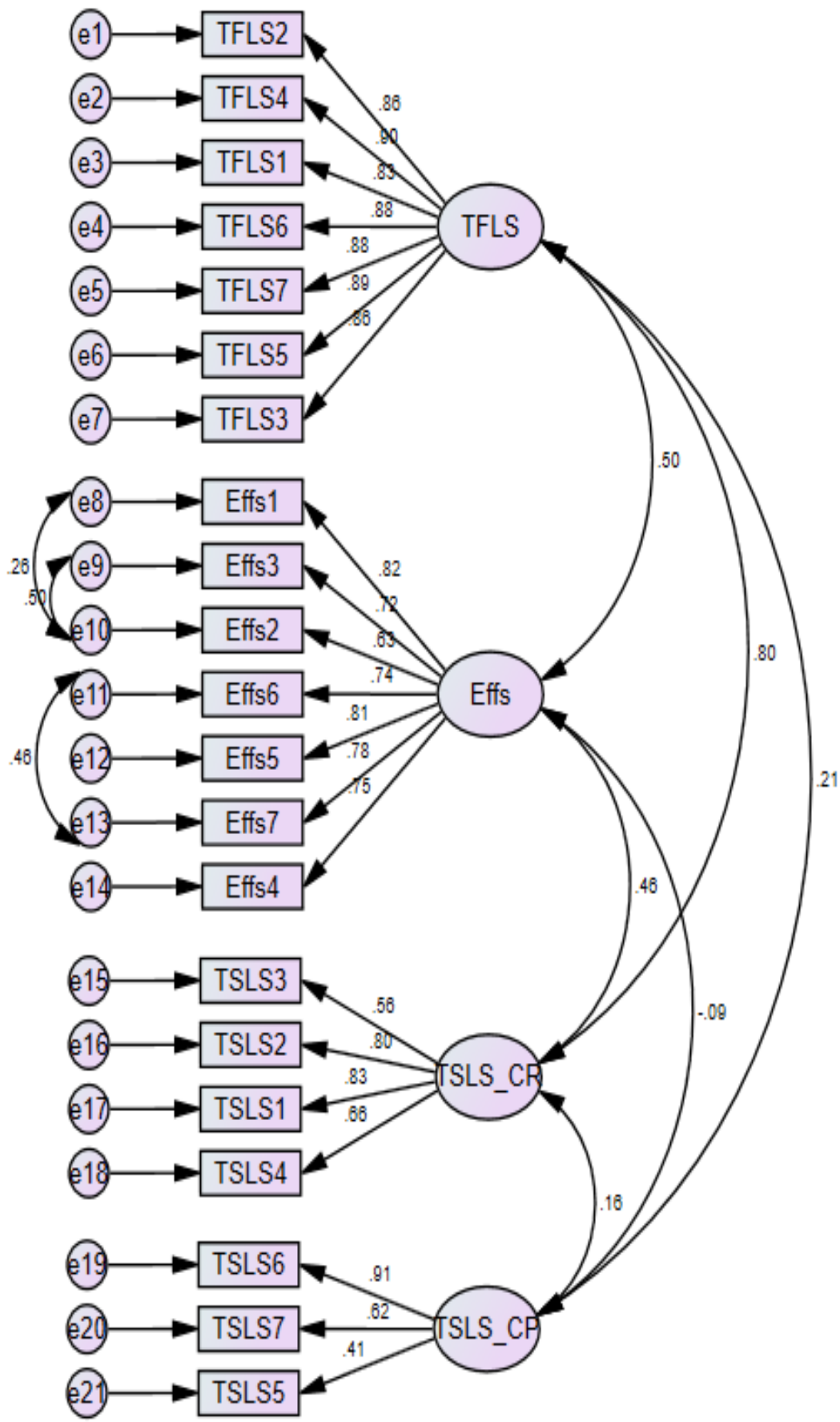
- EFA – Scree plot for intention to quit measure.



- CFA of organizational culture model



- CFA of leadership styles -effectivness model



- CFA of Js, Ocm, and ItQ model

