

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

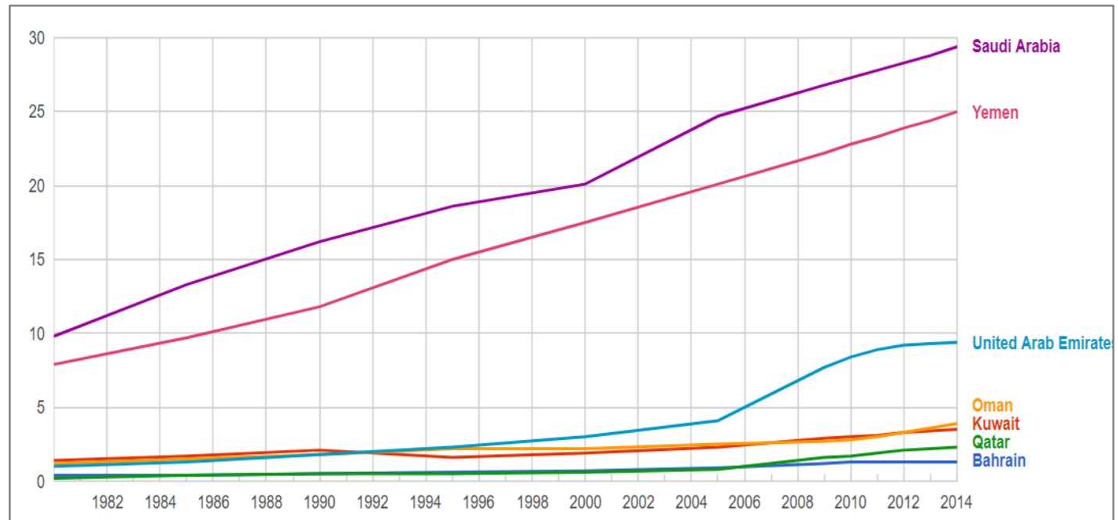
As a systematic literature review, this part will review and elaborate on the available literature about UAE from several aspects namely background of the country, its economy and the public sector. Furthermore, it will contain a literature review on intellectual capital, transformational leadership and organizational innovation. Moreover, this part will shed the light on the relevant theories especially theories of resource dependence theory (RDT) and resource based view (RBV). Besides this, empirical studies reviews will also be illustrated. In addition, this part will explain and discuss the basic concept of how to form a conceptual framework and discuss the conceptual framework based on some aspects of these theories/models and empirical studies. The key determinants in the conceptual framework that are expected to influence organizational innovation in UAE will be proposed and discussed. Furthermore, the main hypotheses of this study will be stated in this part of the study.

#### **2.2 UAE OVERVIEW**

The United Arab Emirates (UAE), an independent country since 1971 consists of seven Emirates. Each Emirate has its Ruler who is usually the head of the most powerful tribe. Substantial oil exports that began in the 1970s have conveyed extraordinary returns and continue to be the driver of growth. Nevertheless, due to the limited skills and work experience of the local population, migrant labour forces have

played a fundamental role in the country's progress. Currently, among the most challenging tasks faced by the UAE is the development of its intellectual capital. Labour migration into the UAE accounts for around 90 percent of the labour force in the private sector according to estimates of the National Human Resource Development and Employment Authority (Central Intelligence Agency, 2017). The current guest worker system adopted by the UAE has prevented import-competing industries from failing in the presence of foreign competition. For these industries to survive, it would not have been probable without the influx of a relatively cheap migrant labour force. Abu Dhabi and Dubai, are the two largest Emirates with a combined GDP of 85 percent of the whole country. The local workforce in Dubai consists of only 2.9 percent while in Abu Dhabi 9.31 percent. Abu Dhabi has a higher distribution of natives in its workforce largely due to the size of its public sector which employs a large number of local workers.

Since its Federation in 1971, the UAE has advanced rapidly and is now renowned for its modern infrastructure, international events and status as a trade and transport hub. It enjoys one of the highest per capita incomes in the world. The UAE has continued its huge growth supported by reforms that offer an institutional framework (BTI, 2016). Currently UAE per capita GDP stands at (\$68,200) for its population of 9.4 million (Human Development Indicators, 2016b) where immigrants make up more than 88% (Central Intelligence Agency, 2017).



**Figure 2.1:** Population, total (millions), UAE compare to neighboring countries  
 Source: (Human Development Indicators, 2016b)

### 2.3 PUBLIC SECTOR IN UAE

The UAE which is a federal monarchy that consists of seven Emirates was formed in 1971, with a population of nine million. The main responsibilities of the federal government are collective matters like foreign affairs, education and public health, security and defence, nationality and immigration policy. Other than these matters are reserved to the local governments of each Emirate. The ruling families of each Emirate appoint all key government positions. Government departments at federal and local levels are designed according to standard policy responsibilities, for example, health, education, and municipalities. The government in the UAE is hybrid, neo-patrimonial (Davidson, 2009) joining soft, traditional power systems with more formalized structures. Besides, the government has a dominant role in the management of the UAE economy and society. Vision 2021 (M. Davidson, 2009) which was announced in 2010, creates a national vision for development, articulating a desire to sustain a strong and prosperous country in merging development and moderate Islamic

values that support balanced socio-economic growth. One noteworthy development is the advancement of women in public life, resulting in more women holding senior public sector positions. The government emphasizes on public consultation over direct elections. Traditional majlis or open forums in which citizens can raise personal and wider concerns to a sheikh or senior family member, still play a central role in the UAE. In 2006, the Federal National Council, as the main consultation body for the federal government transformed to be 50 per cent elected (20 of 40 members), and is perceived as a key element of the government's modernization agenda. Lately, online consultations collecting policy ideas and feedback on public service quality have been introduced. Implications of these developments for public leaders are as yet unclear (Mathias, 2017).

The local governments of the seven emirates vary in size and mechanisms subject to aspects such as population, area, and degree of development. Every emirate has an executive council that works under the direction of the Ruler's Court of that emirate, besides a number of autonomous agencies with clearly specified powers. For instance, Abu Dhabi has its own central governing body which is called the Executive Council, chaired by H. H. Sheikh Mohammed bin Zayed Al Nahyan, Deputy Supreme Commander of the UAE Armed Forces and Crown Prince of Abu Dhabi. The function of the Council is to assist the Ruler to perform his duties and powers. Under this Council, there are several departments and municipalities, which carry out the emirate's plans and policies. Furthermore, Dubai has its own governing body that is called the Dubai Executive Council (DEC) and is considered as the main decision-making government entity in Dubai, with respect to preserving security and order in the city, providing public utilities and achieving its economic and social progress. The Council supports H. H. Sheikh Mohammed bin Rashid Al Maktoum, Ruler of Dubai in

formulating development plans for the emirate and local legislation. The Council is headed by Crown Prince H. H. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum (The UAE government portal, 2018).

## **2.4 RELEVANT THEORIES AND MODELS**

Intellectual capital is an essential element of economics and development. In the new global economy, human capital and social capital have become a central issue since they are important resources to the nations. Moreover, in the area of sustainable competitive advantage, economic success is heavily dependent on intellectual capital.

A good business resource could also be one of the factors to business success. As stated by Inkson (2008), a firm's deployment of unique bundles of resources will result in competitive advantage, which is crucial for business success. Besides good and useful business resources, another factor that contributes in the business development and management is the creativity of the workers as well as the employers.

There are various studies suggesting theories regarding business resources, and this present study discusses two of the theories to provide the ground for present survey. The theories are resources dependence theory (RDT), transformational leadership theory, and self-determination theory. This section highlights the definition of the theories, uses and also some related studies.

### 2.4.1 Self-Determination Theory

The self-determination theory (SDT) (Deci & Ryan, 1985), which is based on the cognitive evaluation theory is utilised to discover people's volitional motivation. The SDT relates whether people regard their actions as autonomous (acting according to choice, interest, pleasure, or values) or controlled (acting according to rewards, punishment, guilt, or obligation). According to the SDT, the autonomy in making choices based on one's unique behavioral justifications and aims will govern his or her following behaviors or actions (Deci & Ryan, 1985). Deci & Ryan (1985) suggested that three types of motivation construct the self-determination behavior, namely intrinsic motivation, extrinsic motivation, and amotivation. These motivation types have different levels of self-determination. Intrinsic motivation is categorized by a high level of autonomy which is associated with behaviors that derive from inherent interest or enjoyment of an undertaking. The indication of autonomy is one's natural tendency to pursue novelty and challenges, as well as discovering and learning for its own sake (Nie et al., 2015). Extrinsic motivation focuses on behaviors influenced by external factors that do not come from within the individual including rewards and threats of punishment, and can be controlled (Nie et al., 2015). Meanwhile, amotivation is the lack of intention to do anything. Hofstede and Minkov (2010) asserted in their book that creating a space for independence and individualism is a determining factor for innovation. Thus, this study argues that the presence of a culture that nurtures individual autonomy in organizations will enhance the positive impact of human, relational, and structural capital as well as transformational leadership on innovation. Consequently, this study investigates the significant influence of intrinsic motivational factor (autonomy) on the relationship among intellectual capital, transformational leadership, and innovation (Zhao et al., 2018).

#### 2.4.2 Transformational Leadership Theory

Transformational leadership has been widely accepted as the ideal leadership style in contemporary organizations. This form of leadership has gained recognition due to the recognizable impact of transformational leadership and its ability to achieve organizational outcomes such as employee satisfaction (Ling et al., 2011; Ngadiman & Ratmawati, 2013) and organizational performance (Afsar et al., 2014). It is widely accepted and mentioned throughout the course of the present study that transformational leadership has the unusual ability to instigate higher order need (C. Yang et al., 2020). They also added that transformational leadership have the ability to motivate employees and generate positive emotions, create inspirational vision and direct followers towards achieving these objectives.

According to Tse et al. (2023), researches on leadership sought to investigate ways through which leaders develop organizations into strong ones. Ultimately, transformational leadership emanated as an effective way to accomplish the goals of organizations as well as improve organizational commitment whilst developing stronger processes towards meeting such goals (Lin, 2023). Transformational leadership combines a set of ideas from traditional leadership approaches including trait, style and contingency to form its unique approach. Drawing on proposed dimensions of transformational leadership by several authors, Aydogdu & Asikgil (2011) derived four dimensions of transformational leadership which are fundamental to the present study - Idealized Influence (behavior), Idealized Influence (attribute), Inspirational Motivation, Intellectual Stimulation and Individualized Consideration.

Aydogdu and Asikgil (2011) have defined transformational leadership as consisting of these four dimensions mentioned earlier. The dimensions cover all areas of holistic as well and individualized approach to meeting organizational and group goals. Dartey-Baah (2015) could not have placed it in a better description as:

“Leadership that acknowledges and have full knowledge of how dependent the attainment of a collective goal is on the relationship and performance of the individual constituents of a system”

In an attempt to touch on the individual constituents of transformational leadership; the first of these is idealized influence (Aydogdu & Asikgil, 2011) which is divided into two main dimensions of behavior and attribute. Idealized influence refers to the charismatic action the leader takes with key regards to values and beliefs as well as the organization’s sense of mission. To elaborate on this, Aydogdu & Asikgil (2011) argued that these actions include informing the members of the organization about his or her important values and beliefs, considering the ethical impacts of his or her decisions on the organization, and emphasizing the organization’s main objectives.

It must be mentioned at this early point that this attribute of transformational leadership style has been linked to the Max Webber charismatic leadership approach; in this leadership approach, leaders are believed to possess acute skills which cannot be found in just any other person (Nikezic et al., 2012). Due to the embedded inspirational and motivational qualities of transformational leadership in this area, they are able to communicate more effectively, stimulating followers and creating a sense of group aspirations which makes everyone within the organization feel they owe some responsibility to the betterment of the organization.

Idealized influence is the second dimension of transformational leadership and it entails the attribution of the followers to the leader. As mentioned before, leadership has taken both a role and attribute perspective and this is acknowledged in defining the underlying elements of transformational leadership. Here, it refers to what the followers think of the leader, whether they consider him or her charismatic, confident and powerful and whether they like their association with him or her (Aydogdu & Asikgil, 2011). As Aydogdu & Asikgil (2011) explained transformational leaders are optimistic, enthusiastic and emphasize commitment to shared goals.

Inspirational motivation is the third dimension of transformational leadership and it entails the ability of the leader to be exemplary to his or her followers (C.-C. Lee et al., 2023). It refers to the methods used by the leader to inspire the followers towards the achievement of organizational objectives as well as their personal goals. The leader may inspire the followers by providing an optimistic view of the organization's future as he or she sets a realistic vision and communicates it effectively to the followers, while providing them with means to achieve set visions. According to Lin (2023) by doing so, leaders can motivate followers and add meaning to their work.

Intellectual stimulation is the fourth dimension of transformational leadership; according to Tian et al. (2023), the intellectual stimulation dimension entails the promotion of followers' rationality and intelligence, and motivating them to be innovative in solving problems. Canterino et al. (2022) argued that this dimension moves followers to reconsider their own values and beliefs as well as their leaders' values and beliefs, they therefore do not completely confine themselves to the methods provided by the leader. They think of new problem-solving methods and this enables them to solve problems that were missed unnoticed by the leader.

Individualized consideration is the last dimension of transformational leadership and refers to the consideration of followers as individuals rather than just members of the group (Lin, 2023). Here, the leader focuses individually on followers' needs and encourages them to develop themselves. The leader guides the followers and motivates them to reach their full potential by enforcing an organizational climate that provides opportunities for followers to learn new things.

### **2.4.3 Resource Dependence Theory (RDT)**

Central to the discipline of Resource Dependence Theory (RDT) is the concept of resource delivery which gains much support from researchers in the studies of resource dependence (Jiang et al., 2023). Jeffrey Pfeffer and Gerald Salancik authored a book entitled "The External Control of Organizations", which led to wide public recognition of the 'resource dependence perspective' concept. This book was republished in 2003 by the same title. The important assumption of RDT described by the scholars is the dependence on the important resources that may influence the actions of organizations. RDT relies heavily on management's capability in obtaining valuable resources for the organization (Hillman & Dalziel, 2003). Scholars highlighted the importance of the valuable individual or internal resources to the organization (Nienhüser, 2008).

RDT conditions that all organizations need resources either by exchanging resources with the environment or external units for survival (Rao et al., 2007). Strategies such as interacting with others who control access to those resources are critical for obtaining valuable resources by the organizations (Rao et al., 2007).

Moreover, to link this theory with the firm performance, several attempts have been made in the area of organization behavior and research of the prominence relation between the resources and organizational performance (Chand & Tarei, 2021). It has been stated that the fundamental suggestion for the organizational survival is the ability to acquire valuable resources from the external environment to the internal environment (Casciaro & Piskorski, 2005).

As a valuable knowledge and information representing the organizational resources (Hakanson, 2010), there are some procedures that can be done by the board of the organizations to gain this valuable resources. Thus, in this study, this theory explains the importance of the resources to the organizations to perform. Intellectual capital as described by (Becker & Gerhart, 1996), is an organization's resource that strongly influences the innovation. Moreover, it is clearly noticeable how the role of the social activities (social capital) is helpful to transfer those resources to the organization in a beneficial way. Therefore, this study built the relationship under the consideration of this theory.

#### **2.4.4 Resource Based View (RBV)**

Over the past decades, most research in intellectual capital has emphasized the use of Resource Based View (RBV) in explaining how internal resources affect competitive advantage and performance of the firm (Armstrong & Shimizu, 2007; Barney, 2001; Wernerfelt, 1984; Wright et al., 1994). Penrose (1959) and Wernerfelt (1984) introduced RBV as a group of resources and capabilities that combined and developed competencies (Rivard et al., 2006). This theory is then developed and formulated by Barney (1991) to answer the question that has been asked so many times by the organizations on why do some firms persistently outperform others? (Barney &

Arikan, 2001). To answer this question scholars tried to target general managers in the firms to compare the profits of the organizations with the strategies of the firm (Barney & Arikan, 2001; Hart, 1995). Thus, in the field of strategic management it became understood long ago that competitive advantage depends heavily on the internal resources of the organization as well as changes in the external environment (Hart, 1995). According to Barney (1991), a resource needs to be valuable, unique and reinforced by skills or socially complex organizational processes for it to be able to offer sustained competitive advantage (SCA). These organizational resources consist of assets, capabilities, processes, attributes, knowledge and know-how, which could be employed in devising and realizing competitive strategies (Barney, Wright, & Ketchen, 2001; Wright et al., 1994). Moreover, as described by Rivard et al. (2006), resources are classified into two main categories namely outside resources-in which represent the external relationship to the market and inside-out resources which represent the information system infrastructure. Wernerfelt (1984) also mentioned some resources that can affect the firm in the long term, which include brand names, in-house technological knowledge, skilled personnel, trading associates, machinery, efficient procedures, capital, and so on.

Based on the RBV, competitive advantage may only be realized in situations whereby firm resources are in heterogeneity, which is also explained as the resources diversity across firms (Wright et al., 1994). The SCA of the firm can mostly be explained by using the RBV theories (Barney, 1991; Barney, 2001). Essentially, organizations can achieve SCA by keeping and controlling valuable and rare assets, as well as being adequately prepared to manage those assets (Barney, 1991; Barney, 2001). Research in the area of Strategic Human Resource or Capital has examined the

relationship between intellectual capital and the RBV(Becker & Gerhart, 1996). Prior studies tend to employ the RBV as a framework and then attempt to frame human capital management (HCM) questions into the RBV framework.

Human capital is explained in RBV as a valuable resource to the organization; however, RBV does not distinguish between each type of human capital (Kraaijenbrink, 2011). RBV suggested that human capital that served as input and enabled the firm to perform and organize such output are valuable resources to the firm (Barney, 1991). This explains how this study is relying on the RBV to explain how human capital affects organizational performance in the context of Saudi Arabia, as the accumulated knowledge and skills amongst the employees represent valuable resources to the firm.

## **2.5 ORGANIZATIONAL INNOVATION (OI)**

Most organizations are working in a turbulent environment with rapid changes in information technology, market uncertainties, shortened product life cycles and competition (Dinopoulos & Syropoulos, 2007; Madrid-Guijarro et al., 2009). Innovation is a fundamental requirement for survival and growth in these environments (Bohlmann et al., 2012). organizations consider innovation to be a critical variable between life and death of the organization (Govindarajan & Trimble, 2005). Moreover, Cooper (2011) noted that the goals of ambitious organizations can be achieved through innovation. In the 21st century, this is one of the main resources needed to achieve sustainability and economic growth (Atalay et al., 2011; Gumusluoğlu & Ilsev, 2009).

The selection of organizational innovation as the dependent variable is grounded in the rich body of literature that underscores its pivotal role in determining an

organization's long-term success and competitiveness. Drawing from various innovation-related theories, such as the dynamic capabilities perspective and the resource-based view, organizational innovation is acknowledged as a key driver of sustained competitive advantage. The dynamic capabilities perspective posits that organizations capable of continuous adaptation and innovation are better equipped to thrive in dynamic and unpredictable environments. Additionally, the resource-based view emphasizes that innovation, as a strategic resource, can contribute to the creation of unique capabilities that are valuable, rare, and difficult to imitate. By positioning organizational innovation as the dependent variable, the research seeks to explore and understand the factors that influence an organization's ability to innovate, thereby contributing to the broader discourse on organizational success, resilience, and adaptability in today's rapidly changing business landscape. The utilization of organizational innovation as the dependent variable aligns with the fundamental premise that innovation is a crucial determinant of an organization's ability to navigate complexities, respond to market demands, and achieve sustainable growth.

There is a diverse range of definitions for innovation. Firstly, most of the research shows that innovation means a creative thing. As an example, Agostini et al. (2017) indicated that innovation would create a new idea, practice, or object according to the view of an individual or other unit of adoption. In addition, Rogers discussed another concept known as diffusion of innovation which over time focuses on the spread through channels of innovation among the members of a social system. In contrast, del-Corte-Lora et al. (2023) suggested that innovation is different from creativity which is the only thing that could be defined as the production of new ideas. Innovation generates

and implements new ideas, processes, and products (Trott, 2005). Therefore, creativity is a component of innovation (Dost et al., 2016).

Although services have unique characteristics which are different from goods, many researchers (de Vries, 2006; Droege et al., 2009) noted that in the service context and according to the assimilation approach, the concepts and theories of innovation employed in the manufacturing sector are easily transferrable to the service sector. In order to investigate innovation in the service sectors, Droege et al. (2009) stated that without affecting the characteristics of innovation in service these studies used the same models as in the manufacturing sector.

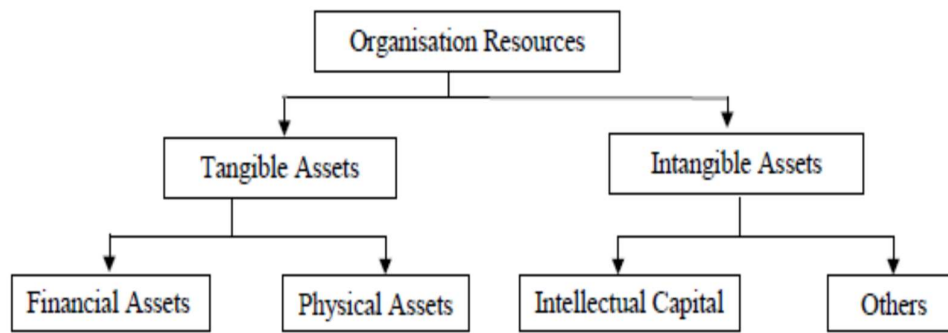
## **2.6 INTELLECTUAL CAPITAL**

Various definitions for intellectual capital are found in the literature. Numerous authors consider it as equivalent to intangible assets. Stewart (1997) defines intellectual capital in terms of “the total stocks of collective knowledge, information, technologies, intellectual property rights, experiences, organizational learning and competencies, team communications, client relations, and market brands that are capable of creating value for corporations.

The next section discusses background regarding intellectual capital, its components, and assessments on its nature.

Organizations possess numerous assets as depicted in figure 2.2, which they apply in performing activities. Organizations in knowledge economies mostly rely on the use of intangible assets in place of tangible assets (Alwis, 2004). Knowledge resources must be treated as elements that vastly enable innovation (Atalay et al., 2011).

This western practice empowers successful organizations to lead in their fields.



**Figure 2.2:** Types of Organization Resources

Innovation-driven corporate profits are mostly derived from intangible assets, including human and other intellectual capital (Yang, 2004). Intangible assets are the main drivers of economic value-added in globalised markets (Lev & Daum, 2004). In addition, Chen & Huang (2009) emphasised that the fundamental source of wealth is found in intangible assets which sustain organizations by enabling them to interact in uncertain competitive environments. With intangible assets, the overall intellectual capital plays a critical role in sustaining businesses through the creation of new value (Bose & Thomas, 2007). Intellectual capital has a vital function in helping organizations achieve their aims under uncertain environmental conditions (Johnson, 1999). The resources help firms to gain competitive advantages. Intellectual capital is also a suitable source for innovation (Youndt et al., 2004). Wang & Chang (2005) reported that its accumulation should lead to the maximisation of corporate performance. Successful innovation as the key resource of organizational advancement therefore relies on such unique assets which includes human and other intellectual capital (Yang, 2004).

### 2.6.1 Components of Intellectual Capital

The categorisation of intellectual capital according to structural, human, and relational capital helps to facilitate the understanding of the elemental concepts involved. Material information on intellectual capital may be collected and analysed more easily through these sub-domains (Bounfour, 2005). Some prior research have categorised intellectual capital according to two primary types namely structural and human capital (Edvinsson & Malone, 1997; Roos et al., 1997). Structural capital was then categorised further into relational and structural capital. Marr, Gray & Neely (2003) utilised a similar categorization that differed in its separation of structural capital into innovation and process capital types, with an overall focus on institutional procedures and organizational capacity for innovation.

There are certain studies that classified intellectual capital according to three types namely human, relational, and structural capital (Tayles et al., 2007). In addition, Youndt et al. (2004) utilised social capital in place of relational capital. Other researchers have categorised intellectual capital according to four types namely structural, human, innovation, and relational capital (Bounfour, 2005).

In accordance with the above research, it was established that intellectual capital comprises three primary elements which are human capital, organizational capital and customer capital. This research adopts the preceding categorisation, while adding social capital as the fourth component under intellectual capital. Therefore, intellectual capital comprises four parts. This novel classification is critical, for it provides a total picture of the various levels in terms of individual, group-based, and organizational knowledge, the last of which conveys internal knowledge (informal and formal knowledge) as well as external knowledge from environmental resources including customers.

Other studies have extensively examined intellectual capital, A study was carried out by Sharabati, Jawad & Bontis (2010) in order to empirically test relationships between intellectual capital (structural, human, relational) and corporate performance in the pharmaceutical industry in Jordan. The findings present positive and robust evidence for pharmaceutical corporations in Jordan that have managed their intellectual capital and in ways that have positively influenced their commercial performance.

Similarly, Gogan, Artene, Sarca, & Draghici (2016) initiated research on four drinking-water distribution firms in Romania, in order to assess intellectual-capital effects on organizational performance. Their research findings showed that a significant association is present between intellectual capital and organizational performance. Furthermore, case studies were conducted on public-sector universities located in southern Punjab-Pakistan. Two institutions were included namely Islamia University Multan and Bahauddin Zakariya University Multan. The findings similarly showed intellectual-capital effects (structural, human, relational) on organizational performance.

Further research was carried out by Telbani (2013), wherein the author established three components comprising intellectual capital that had meaningful positive relationships with innovative behaviours in the Jawwal Company. Alternate studies were carried out by Busaibe, Singh, & Ahmad (2017) in order to examine the aspects that influence organizational innovation in the petroleum and gas sector of the United Arab Emirates (UAE). Their findings showed that organizational culture and organizational leadership remained key drivers for organizational innovation.

Further research by Chang & Lee (2008) demonstrated that both external environments and organizational cultures present meaningful interaction effects on organizational innovation, along with the capacity for accumulating knowledge. Conversely, research conducted by Chen, Zheng, Yang, & Bai (2016) investigated the forces that drive organizational innovation in China, in particular the leadership of transformational CEOs. The results showed that external and internal social capital both mediate associations between organizational innovation and transformational leadership.

From the preceding analysis of the various classifications of intellectual capital, the research divides intellectual capital according to human, relational, and structural capital.

#### **2.6.1.1 Human Capital**

Human capital accepts workforce competencies as comprising knowledge, skill sets, talent, work experiences, and educational as well as job qualifications (Chen & Huang, 2009; Edvinsson & Malone, 1997; Roos et al., 1997). It can be said that human capital remains embedded in the minds of employees (Lee et al., 2011). Delgado-Verde, Cooper, & Castro (2015) emphasise that human capital involves all the implicit as well as explicit material knowledge that workers possess. Organizations can obtain these resources by renting or else borrowing them. Human capital derives from both genetic inheritance as well as learning aspects (Bontis, 1998; Chen & Huang, 2009). Therefore, the main challenge is to determine how corporations acquire human capital towards maximising their goals under conditions of continuing uncertainty.

Organizations must treat staff as assets instead of costs, since skilled manpower remains the most valuable aspect in innovative, performance-based considerations. In service economies, human capital is rightly seen as the foundation of important and successful firms (Neisser et al., 1996). In both organizations and workers, human capital investments can produce meaningful output. This great resource may well be the most critical facet of intellectual capital due to its primary role in developing relational and structural capital (Bontis, 1999; Bontis, 2004). Human capital remains vital in the creation of value and in the attainment of successful performance towards competitive advantages for firms (Chen & Huang, 2009). Ethiraj & Garg (2012) report that organizations with less skilled workers are at the mercy of the market forces prevailing in turbulent environments, which can lead to failures. A corporation must pursue human capital investments in order to improve its skill and knowledge base, for such will reflect on its performance as well as the potentials of its workforce (James, 2000).

In the literature on resource-based analyses, human capital represents an organization's key strategic asset. The resource dependence theory (RDT) asserts that human capital remains a vital source of innovations, competitive advantages, and thus corporate prosperity. It therefore tends to be extremely valuable, rare, not readily imitated, and without substitutes (Galunic & Anderson, 2000; Hsu & Wang, 2012; Taegoo (Terry) Kim et al., 2012). Human capital has a key function in the development of each component and is therefore seen as the core of intellectual capital (Bontis, 2004). Consequently, knowledgeable employees who possess innovative skills tend to advantage the corporation by devising new methods that improve production, plant, and process output as well as newer products or services.

### 2.6.1.2 Structural Capital

Structural capital comprises various elements that are structurally embedded in organizations and work to support the employees who are working and creating wealth (Bollen et al., 2006; Yang & Lin, 2009). Structural capital involves “everything that supports employee productivity” (Edvinsson & Malone, 1997). Structural capital involves organizational knowledge as well as codified experiences, all of which form parts of organizational culture, knowledge management systems, efficiency processes, and top-level managerial support (Yang & Lin, 2009). Process efficiency encompasses internal procedures that enable the integration of knowledge for creating wealth in corporations (Yang & Lin, 2009). The resource therefore represents non-human assets in terms of the organizational infrastructure with which human capital creates value-added output (Bontis, 2001). Organizations with poor intellectual and structural capital typically fail to accomplish many of their own aims. Clearly, structural capital retains a critical role in leveraging intellectual capital, for it can encourage workers to raise their work performance (Bontis, 1998). Structural capital expands workforce knowledge which in turn strengthens organizational knowledge (Stewart, 1997).

Knowledge management involves the processes of creating, sharing, and using informational resources (Liao, Chuang, & To, 2011). The field emphasises the discovery and application of information that supports decision making under uncertain conditions (Alavi & Leidner, 2001). Knowledge management is treated as a key precursor that affects innovative practices (Honarpour et al., 2012). Dalkir, Wiseman, Shulha, & McIntyre (2007) believed that its influential methods and activities facilitate innovation and intellectual capital. The acquisition of knowledge is the activity that facilitates information gathering for it involves processes where critical knowledge is

embraced and in turn is applied using other assets (Parra-Requena et al., 2010; Zhou & Li, 2012). Corporations acquire knowledge in external markets as well as from their own workforces. These assets provide numerous opportunities for organizations to reuse their current knowledge base towards acquiring more valuable working information (Chen & Huang, 2009; Hsu & Wang, 2012). Workers spend time and effort to obtain specialised knowledge associated with their experiences (Kim, Yoo, & Lee, 2011). The acquisition of knowledge concerns discovery, which involves the exploration and search for good information. In addition, practitioners are committed to the creation or development of novel ideas and are thereby incentivised to learn from stakeholders who are their key resources of external good information (Lavie & Drori, 2012). Although the acquisition of information remains vital in knowledge management, the behaviour is insufficient for organising its practices efficiently (Kotabe et al., 2011). Knowledge management must also integrate information gathering with other informational activities in a process termed knowledge sharing, along with the related applications that help attain objectives. Knowledge sharing remains an essential method that motivates workers to exchange informal and formal knowledge mutually. It adds to knowledge-based applications that support innovations and lead to competitive advantages (Hsu & Wang, 2012). Its practice conveys information across contexts that are in need of operating information. Knowledge sharing occurs at varying levels, as it happens among workers or runs from individuals towards groups or organizations (Choi et al., 2010). The process implies that via sending as well as receiving channels, knowledge sharing involves frequent mutual exchanges of information between organizations, groups, and persons (Foss et al., 2009). Conversely, the application of knowledge is critical to the successful development of newer products, services and processes. Organizations must therefore continually

create, distribute, and use new knowledge that reinforces innovative behaviours while sustaining competitive advantages (Song et al., 2005). In organizations, it involves organizational and personal users of information (Berta et al., 2010). Knowledge application involves the transformation and exploitation of newly developed knowledge towards effective activities that lead to commercial success (Lavie & Drori, 2012).

Culture is described as a set of beliefs, values, and attitudes in terms of norms and expectations that are common to particular groups (Jacobs et al., 2013). Organizational culture can be explained as the shared set of values, rules, and assumptions that guide workforce behavior in a corporation (Braunscheidel et al., 2010; Schein, 2010). The concept signifies a meaningful social attribute that influences individual, group-based, and organizational behaviors (Hartnell et al., 2011). Organizational culture should be treated as an intangible asset for it is a primary enabler of competitive advantage (Zheng et al., 2010). Numerous research works have confirmed organizational culture as having a primary function that supports innovation, since workers would engage in innovative behaviors if they were to believe that such represents a basic value in their organization. Such beliefs therefore promote meaningful commitment to innovative practices (Naranjo-Valencia et al., 2011). Parker & Skitmore (2005) noted that organizational culture is frequently regarded as the primary reason for failures in the application of organizational change programs as well as turnover experienced in project management.

Organizational structure is described in terms of work roles and authorities and how these are distributed in ways that organise and shape decision-making (Huang et al., 2011). This research emphasised on two key aspects of organizational structures including formalization and centralization (Oldham & Cummings, 1996).

Centralization is described as “the degree to which decision-making authority is concentrated at top-level management”. Namely, it involves the degree of participation by workers in decision-making. Most prior research has suggested that decentralized organizational structures can support organizational development, whereas some will only note that high centralization can have positive effects on organizational efficiency (Zheng et al., 2010). Conversely, formalization refers to the degree to which a corporation relies on sets of rules and procedures that organize and also support the behavior of its workers (Liao et al., 2011). This approach helps to guide and shape workers’ behaviors. Accordingly, different workers will carry out similar work tasks. High levels of formalization and centralization will therefore lead to uniformity of behavior, actions, and policing (Katsikea et al., 2011).

In similar manner, support from top-level management can be described as the degree of support that top-level management affords innovation via the provision of adequate capital and human resources in addition to workplaces that promote innovation and creativity (Carbonell & Rodriguez-Escudero, 2009). Moore, Konrad, & Hunt (2010) claim that top-level management support vastly increases corporate effectiveness and remains the single most critical factor in corporate success (Young & Poon, 2013), for it emphasises the more strategic fields that the firms enter (Talke et al., 2010; Young & Jordan, 2008). This resource therefore has a central role when it comes to strategic decisions that can affect current as well as future corporate performance (Camelo et al., 2010). Top-level management support is vital to product innovation for only corporate leaders would have the authority as well as expertise to reassign corporate resources efficiently, towards improving organizational output (Hoejmose et al., 2013).

### 2.6.1.3 Relational Capital

Relational capital is a core area of study in the field of marketing and intellectual capital research. The resource is critical to enabling competitive advantage in businesses (Kohtamäki et al., 2021). Firms that develop good connections with their stakeholders will effectively emphasise critical product and service quality activities (Sambasivan et al., 2013). Organizations suffer from certain opportunistic behaviours by stakeholders that tend to raise transaction costs. They can develop more suitable partner relationships based on mutual interests (Elsetouhi, 2014).

As reported by researchers, relational capital comprises knowledge that is embedded in internal relationships (Nahapiet & Ghoshal, 1998) as well as external ones, including relationships between a corporation and its various customers (Bontis, 1999; Yang & Lin, 2009).

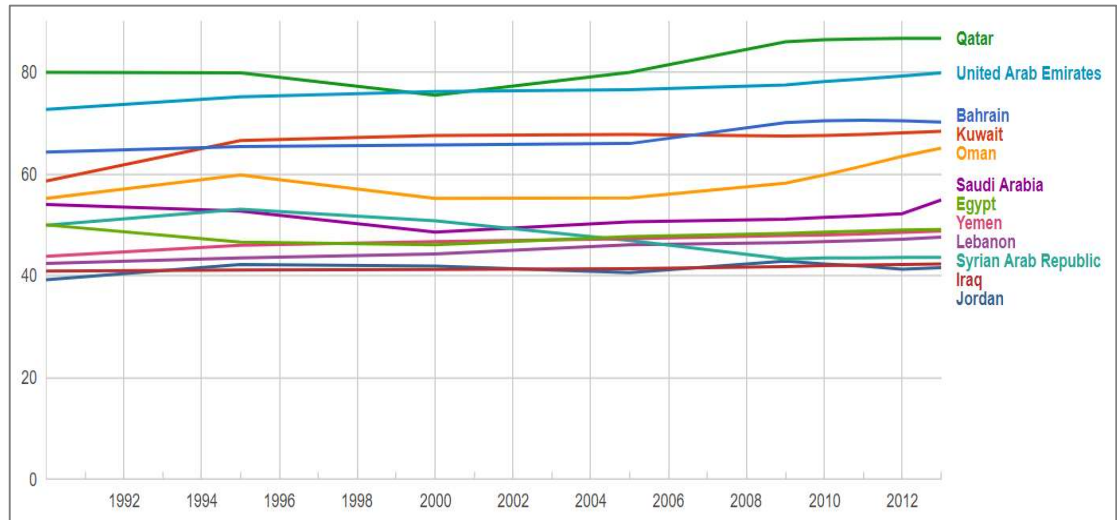
Relational capital comprises a resource for informal communications (Yamaguchi, 2013). Academic researchers are increasingly interested in this management resource, for it is viewed as an enabler of innovation that brings successful performance (Arribas et al., 2013). Relational capital refers to the “summation of potential and actual resources embedded in, available throughout, and derived from the web of relationships of individuals or social units” (Nahapiet & Ghoshal, 1998). Furthermore, Youndt et al. (2004) noted that the concept denotes informal interactions among workers that lead to the development of desirable work environments as team members smoothly exchange information. This resource therefore results from interactions and collaborations among staffs within an organization, who mutually share their knowledge as well as experiences. Moreover, intellectual capital grows in organizations that enjoy high levels of this resource, for it enables their workers to carry

out complex activities while overcoming challenging environments (Nahapiet & Ghoshal, 1998). As it enhances the depth and effectiveness of mutual exchanges of information, this aspect is viewed as critical to social capital (Weber & Weber, 2007).

External relationships involve links between a corporation and its various stakeholders, including shareholders, customers, suppliers, rivals, and so on. External relational capital can be described in terms of the knowledge that derives from these connections. It can be treated as another intangible corporate asset (Chang & Lee, 2008), for such connections among workers and external stakeholders have a critical function in enabling productive innovation.

#### **2.6.2 Intellectual Capital in the UAE**

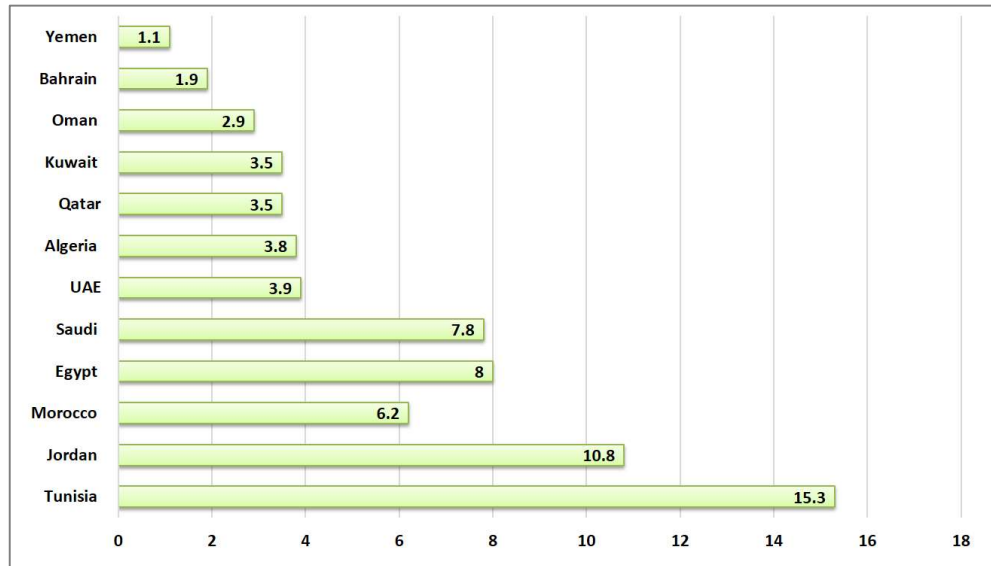
Percentage of a country's working-age population that engages actively in the labor market either by working or looking for work provides an indication of the relative size of the supply of labor available to engage in the production of goods and services. In the UAE, the labor force participation is nearly 80% which represents people aged 15 years old and above (Human Development Indicators, 2020a). When compared to Arab nations specially Gulf countries UAE leads ahead since it comes after Qatar in the aforementioned matter. Hence, this indicates that the UAE has a great human capital that can be a great capital for the country in general to thrive and improve its positions in all development indicators which consequently will bring the UAE to the same level of its Asian and western counterparts.



**Figure 2.3:** Labor force participation rate (% ages 15 and older), UAE compare to neighboring countries  
 Source: (Human Development Indicators, 2020a)

However, when comparing the UAE to its neighboring countries in term of knowledge creation, the UAE scored 3.9 out of 100, which is a small number when comparing with the region. The Saudi Arabia has done better with a 7.8 score, while Egypt scored 8. According to the (Global Innovation Index, 2017) Tunisia scored 15.3 which illustrated how the UAE was lagging behind in creating knowledge and utilizing that knowledge.

Intellectual capital as intangible capital plays a major role in any organization performance and innovation. Utilizing and using intellectual capital will improve the innovation of organizations. The UAE has that and should also use it to reach a higher place among first world countries as it is doing so well among the regional countries specially the Gulf countries which are the world biggest producer of oil and gas.



**Figure 2.4:** UAE compare to neighboring countries regarding knowledge creation (Score 0–100)

Source: (Global Innovation Index, 2019)

### 2.6.3 Intellectual Capital and Organizational Innovation

Organizations of all sizes; small, medium and large can be analyzed from strategic Human Capital Management (HCM) perspective because all depend on some kind of human resourcing process (Watson, 1994). Human capital namely knowledge, skills and attitude have the same significance for organizations whether private, public or voluntary. While an adequate level of human and social capital is necessary for the viability of any organization, human and social capital may help it to build and sustain superior innovation (Spender, 1989). Human capital has a positive influence on innovation (Wu et al., 2008).

How innovation is measured has been an important topic of discussion but it is rarely defined (Neely, 2005). The initial idea of innovation measurement involves the objective to be achieved and how it is to be achieved. Neely et al. (1995) then proposed

several definitions involving innovation measure, innovation measurement and innovation measurement system as follows:

- “An innovation measure can be defined as a metric used to quantify the efficiency and/or effectiveness of action.”
- “Innovation measurement can be defined as the process of quantifying the efficiency and effectiveness of action.”
- “An innovation measurement system can be defined as the set of metrics used to quantify both the efficiency and effectiveness of actions.”

Researchers have intensely studied intellectual capital in relation to innovation, in terms of employees' innovation and how intellectual capital manipulates individual's earnings (Nerdrum & Erikson, 2001). Stiles & Kulvisacchana (2003) explained that employees who invest in knowledge and training will have their skill level improved and raise their productivity than those who are less skilled. Skills and productivity ensure them to receive higher earnings as improving the quality of labour respectively improve their productivity (Teixeira & Queirós, 2016). Consequently, the link between intellectual capital and innovation impacts on employee commitment, quality and flexibility (West et al., 1997) although the connection between intellectual capital and innovation is found as indirect. In a previous study, West et al., (1997) reported that employee attitudes, organizational culture, human resource which include human capital, as well as company innovation are positively related. They concluded that improvement in innovation is resulted from committed employee and a satisfied workforce.

Extensive research has been conducted with regard to intellectual capital and their impact on the innovation of an organization and clearly the development of human

capital will lead to improved competitiveness and innovation (Agarwala, 2003; Guthrie, Petty & Johanson, 2001; Huggett & Kaplan, 2015). Meanwhile, from the viewpoint of intellectual capital, a significant relationship exists between innovativeness and the innovation of an organization (Dess & Lumpkin, 2005). From an organizational perspective, human capital plays a vital role in strategic planning so as to gain competitive benefits.

According to Lepak & Snell (1999), the intellectual capital of an organization consists of two aspects which are value and uniqueness. Resources have value if they lead to an improvement in the effectiveness, the exploitation of opportunities and the neutralization of threats. In terms of effective management, value is aimed at increasing profits rather than the related costs. As such, the human capital of an organization can add value by lowering costs and improving innovation (Marimuthu, Arokiasamy & Ismail, 2009).

Teixeira & Queirós (2016) emphasized on the role of skillful human capital to the entrepreneurial success, they highlighted the importance of creating new ideas and generating new businesses to the efficiency of the organizational innovation. Human capital as mentioned by Shafloot (2012) influenced not only the innovation but also organizational factors such as job flexibility, security, and problem solving opportunities. All the above mentioned factors enhance employees' motivation and contribute to the development of self-efficacy needed to transfer knowledge and skills.

Thus, it is important to investigate the influence of intellectual capital on organizational innovation and the function of intermediate variables among them, besides evaluating the relationships among these variables including human capital and social capital. This may aid in the design of a proposed integrated model to examine

and evaluate those relationships in the organizations in the UAE context through the creation of a conceptual framework for the study and description of those relationships (Al-bahussin & El-garaihy, 2013).

## **2.7 JOB SATISFACTION (JS)**

Job satisfaction can be defined in many ways. This study prefers the definition of Macdonald & MacIntyre (1997) as it gives a comprehensive definition as the highest level of enjoyment that employee feels in the working area influenced by cultural, personal factors and the organizational environment. Job satisfaction is the reflection of employee's satisfaction toward the organization. Employee who is satisfied with the enterprise is probably willing to work harder. The two models of Frederick Herzberg and Abraham Maslow show that employee satisfaction is presented in self-satisfaction, which comes from the work itself and the recognition (Pu et al., 2024). Then, any problem with satisfaction among the levels of the two models demotivate employees. In addition to salary and personal matters, other factors are policies, working conditions, and job security (Arvidsson et al., 2022). The productivity of the employee is more related to job security. As a matter of fact, lack of security drives employees to seek another job to secure their future. Similarly, the corporate policies when become high restrictive regarding personnel movement, job freedom, or similar practices may demotivate employee's chosen career. The self-actualization areas of satisfaction exist at the top of the Maslow and Herzberg hierarchy, and involve advancement, status, recognition, and the work itself. Those needs are most often driven by the employees, as each employee should comprehend their wishes for their career and the probability of accomplishing those goals in their current job (El Mouaddib et al., 2023).

Job satisfaction has another perspective, which is a satisfaction outcome of meaningfulness at workplace and employees' accomplishments (Bryan & Vitello-Cicciu, 2022). As a matter of fact, Job satisfaction causes job performance (Sang Long et al., 2016). The feeling of being important for the organization cause them to have a clear vision for their role in the organizations, Employees record high levels of job satisfaction (Sang Long et al., 2016). In addition, satisfaction in the eyes of the employee may mean that the treatment inside and outside their organization is meeting their expectation (Sang Long et al., 2016). Consequently, their satisfaction is reflected in the organization's performance. Then it could be said that job satisfaction is a very important key performance indicator that organizations may utilize to evaluate overall employee's performance. Moreover, it has been noticed that the majority of satisfied employee show high confidence than others, and that employees perform well (Rim & Kim, 2024). Job satisfaction is found to be connected to the willingness of employees to work themselves and develop their skills and personalities as they feel they have future in their future (Sang Long et al., 2016). Employees are characterized with various personalities, and then, employee's expectations regarding job may differ from other employees. Then, the conclusion is that employee's positive emotional state is related to their satisfaction.

Job satisfaction plays a pivotal role in fostering organizational innovation, acting as a catalyst that propels creativity and productivity within a workplace. When employees feel content and fulfilled in their roles, they are more likely to engage actively in their tasks, resulting in a conducive environment for innovation to flourish (Asif et al., 2019). Satisfied employees tend to exhibit higher levels of commitment and motivation, paving the way for collaborative efforts and the exchange of novel ideas.

Furthermore, a positive work atmosphere, born out of job satisfaction, encourages open communication and a willingness to experiment with new approaches and methodologies (Nguyen, 2020). In contrast, organizations plagued by low job satisfaction may witness a decline in employee morale, creativity, and overall enthusiasm for change. The intrinsic link between job satisfaction and organizational innovation underscores the importance of cultivating a workplace culture that prioritizes employee well-being, thereby laying the groundwork for a dynamic and forward-thinking organization (Grolleau et al., 2022).

## **2.8 LEADERSHIP**

This section discusses and reviews the literature which is related to the construct transformational leadership, starting with the definitions, then the related studies that examine the construct, and finally the different measurements in the related literature.

Recently, the role of transformational leadership is becoming increasingly important in studying the success of information system and technology adaption. In general and according to Bass (1990) transformational leadership occurs when leaders raise their employees' interests by creating awareness and acceptance of a certain purpose, and by motivating them to work for higher goals to fulfill self-actualizing needs (Riggio & Bass, 1997). Furthermore, transformational leadership is defined based in four elements namely charisma, individual consideration, intellectual stimulation, and inspirational motivation (Elkhani et al., 2014; Schepers et al., 2005). As it is more often used in the organizational level (Schepers et al., 2005), transformational leadership is seen as the method to create a clear vision, increase awareness about problems, and motivate followers to find new ways to improve current performance (Antonakis & House, 2014).

Furthermore, transformational leadership refers to the notion of how leaders can use idealized influence (charisma), inspiration, intellectual stimulation, or individualized consideration to mobilize the followers beyond their immediate self-interests into maturity level that strives for achievement, self-actualization and the well-being of others, the organization and society (Erkutlu, 2008). In the public sector and enhancing the innovation management can stimulate high levels of confidence by providing support, facilities, and coaching to employees to improve the innovation in public sector.

### **2.8.1 Transactional Versus Transformational Leadership**

Two main forms of leadership have been associated with trust and these include transactional leadership and transformational leadership (Asencio & Mujkic, 2016). Transactional leadership has been defined as the type of leadership which ensures process of exchange between leaders and followers. Hence, due to leadership acknowledgement of subordinates needs and the need to provide financial services and organizational recognition as motivational factors, transactional leadership has the ability to induce performance in the form of improved performance (Tracey & Hinkin, 1998). According to Bass (1990), two main aspects of transactional leadership have established close association with ability to gain the trust of followers; these include contingent reward and management by exception.

It must be added that the use of motivational and reward elements to gain the trust of followers in transactional leadership has been thoroughly established (Bass & Avolio, 2000). This is a feature of contingent reward mentioned earlier as associated with followers' trust of leadership. In the same manner as transactional leadership are able to incite rewards for good behavior, leadership in this case also has the authority

to penalize followers who perform unacceptable behavior (Bass, 1997). Another attribute of transactional leadership which is management by exception is exhibited where leaders take action in the form of corrective measures when deviation from the norm is observed; this however is affected by the level of leadership involvement as mentioned by (Riggio & Bass, 1997).

On the mention of transactional leadership involvement and its ability to motivate followers and ensure improved performance, it may be added that most recommended approach to good management is in the form of 'active management by exception' (Riggio & Bass, 1997) It is only on this note that leaders can monitor developments among followers and take corrective action almost immediately or even before the deviation occurs. As opposed to active management by exception, passive management by exception may induce leadership to act only after the problem arises. Regardless of the approach used, one may argue that the particular situation may call for active or passive management by exception over the other. Regardless of this, the relationship between transactional leadership and trust has been established (Asencio & Mujkic, 2016).

The argument continues that aside from transactional leadership, transformational leadership has well gained dominance in literature as one of the main forms of leadership that can be used to generate organizational commitment and help followers look beyond their self-interest (Bass, 1990). By putting the interest of the group at first, transformational leaders are more capable of promoting organizational commitment (Bass & Avolio, 2000). As described in context of transactional leadership, Bass (1985) argues that transformational leadership exhibit key characteristics of transformational leadership induces trust and these qualities include (1) building

commitment among followers, (2) instigating them to achieve above set standards, (3) activating higher order intrinsic needs, and (4) finally directing attention to how workers or followers may empower themselves rather than working towards dependence.

Furthermore, transformational leadership and innovation in China were examined by Afsar, Badir, & Saeed (2014), whose findings showed that psychological empowerment mediates associations between innovative workplace behaviour and transformational leadership. Furthermore, Xiao, Zhang, & Ordo (2017) carried out research to assess affected task performances in China, in which the findings demonstrate that transformational leaders and a culture of sharing knowledge both have positive influences on the performance of tasks. Moreover, innovation in Korean workforces has been investigated by Choi, Kim, Ullah, & Kang (2016), who showed that the presence of transformational leaders is meaningfully associated with innovative behaviour and the sharing of knowledge among workers.

Other studies have explained that intellectual stimulation, emotional intelligence, openness of communication, and other such attributes of leaders may be directed at instigating trust and confidence in leadership (Bennis & Nanus, 1985; Gillespie & Mann, 2004). As a conclusion, the concept of resilient leadership was coined out of a combination of transactional and transformational leadership as the best form of leadership recommended for today's vulnerable, uncertain, complex and ambiguous (VUCA) world (Dartey-Baah, 2015),

### **2.8.2 Leadership in Public Sector Innovation (Performance)**

Leadership has been established as a very important factor in public organizations (Fernandez & Rainey, 2006; Van Wart, 2005). In "Dynamics of

leadership in public service: theory and practice”, Van Wart (2005), analyzed leadership competences in the public sector into 10 main areas of self-confidence, resilience, decisiveness, energy, need for achievement, willingness to assume responsibility, service mentality, emotional maturity, persona integrity and flexibility. This direction of Van Wart (2005) argument was based on the trait theory of leadership. It must be mentioned that the exclusion of other traits was considered due to overlapping nature of certain traits. Nonetheless, Van Wart (2005) again established key behaviors of leadership in public organizations based on the behavioral theory approach to leadership. Here, Van Wart (2005) established that behaviors may be task-oriented, people oriented, or organizational oriented behaviors. This is much in line even though not the same as Likert (1961) original proposition of behavioral theory of leadership.

It must however be mentioned that Van Wart (2005) behavioral approach to leadership in public was not the exact replica of Likert (1961) and this is embedded in the definition of organizational orientation. Organizational behavior in this case is defined as a dualism of task and people orientation and represent a situational kind of leadership which brings attention to the external environment and systems perspectives. In another investigation by Moynihan & Ingraham (2004), leadership thoroughly defined with particular attention to the adoption of an integrated approach in the public sector.

There is no doubt that leadership in the public sector remains a critical component of success in the sector. Despite the varied perspectives of leadership, in the public sector studies including Lambright (1995) has focused on the contribution of extraordinary characteristics of the individual leaders. Moynihan & Ingraham (2004) however mentioned that a focus on individual managers in the public sector reduces the

ability to achieve more generalizable findings which could be of key benefit to public managers and federal institutions in the present study.

Conceptualization of theories of leadership in the public sector has paid particular attention to the external environment of the leader and how key activities are implemented to realize particular agenda (Doig & Hargrove, 1990). Moynihan & Ingraham (2004) highlighted that Doig & Hargrove (1990) have offered excessive attention to the outside environment within which the leaders operate and neglect the internal management processes leaders are required to handle alongside. On this note, Moynihan & Ingraham (2004) fall on the transactional and transformational leadership styles as providing answers to the internal orientation of leadership including relationship between followers and leaders as well as the motivational power of leaders.

Moynihan & Ingraham (2004) argued that the transformational leadership model has evolved as highly connected to the power of leaders in government to motivate followers and create a culture of organizational entrepreneurship. This has however drawn criticisms from others including (Terry, 1998) that the transformational leadership is unsuitable for the reinvesting approach to the government. Moynihan & Ingraham (2004) in attempt to establish a model for the public sector came up with an integrated model which rather neglected the political environment as well as the leadership traits; this model describes public leaders in context of the organization of which they possess some amount of control.

### **2.8.3 Transformational Leadership (TL)**

Transformational leadership has been widely accepted as the ideal leadership style in contemporary organizations. This form of leadership has gained recognition due

to the recognizable impact of transformational leadership and its ability to achieve organizational outcomes such as employee satisfaction (Ling et al., 2011; Ngadiman & Ratmawati, 2013) and organizational performance (Afsar et al., 2014). It is widely accepted and mentioned throughout the course of the present study that transformational leadership has the unusual ability to instigate higher order need (Chen et al., 2016a). They also add that transformational leadership can motivate employees and generate positive emotions, create inspirational vision and direct followers towards achieving these objectives.

According to Kroon et al. (2017), during the 1980s researches on leadership sought to investigate ways through which leaders develop organizations into strong ones. Ultimately, transformational leadership emanated as an effective way to accomplish the goals of organizations as well as improve organizational commitment whilst developing stronger processes towards meeting such goals (Chang et al., 2017). Transformational leadership combines a set of ideas from traditional leadership approaches including trait, style and contingency to form its unique approach (Han et al., 2020). Drawing on proposed dimensions of transformational leadership by several authors, Aydogdu & Asikgil (2011) derived five dimensions of transformational leadership which are fundamental to the present study - idealized influence (behavior), idealized influence (attribute), inspirational motivation, intellectual stimulation and individualized consideration.

Aydogdu & Asikgil (2011) have defined transformational leadership as consisting of these five dimensions mentioned earlier. The dimensions cover all areas and utilize individualized approach to meet organizational and group goals. Dartey-Baah (2015) could not have placed it in a better description as:

“Leadership that acknowledges and have full knowledge of how dependent the attainment of a collective goal is on the relationship and performance of the individual constituents of a system”

In an attempt to touch on the individual constituents of transformational leadership; the first of these is idealized influence (Aydogdu & Asikgil, 2011) Idealized influence is divided into two main dimensions of behavior and attribute. Idealized influence refers to the charismatic action the leader takes with key regards to values and beliefs as well as the organization’s sense of mission (Antonakis et al., 2003). Aydogdu & Asikgil (2011) argued that these actions include informing the members of the organization about his or her important values and beliefs, considering the ethical impacts of his or her decisions on the organization, and emphasizing on the organization’s main objectives.

It must be mentioned at this early point that this attribute of transformational leadership style has been linked to the Max Webber charismatic leadership approach. In this leadership approach, leaders are believed to possess acute skills which cannot be found in just any other person (Nikezic et al., 2012). Due to the embedded inspirational and motivational qualities of transformational leadership in this area, they are able to communicate more effectively, stimulating followers and creating a sense of group aspirations which makes everyone within the organization feel they owe some responsibility to the betterment of the organization.

Idealized influence is the second dimension of transformational leadership and it entails the attribution of the followers to the leader. As mentioned before, leadership has taken both a role and attribute perspective and this is acknowledged in defining the underlying elements of transformational leadership. Here, it refers to what the followers

think of the leader, whether they consider him or her charismatic, confident and powerful and whether they like their association with him or her (Aydogdu & Asikgil, 2011). As Aydogdu & Asikgil (2011) explained, transformational leaders are optimistic, enthusiastic and emphasize commitment to shared goals.

Inspirational motivation is the third dimension of transformational leadership and it entails the ability of the leader to be exemplary to his or her followers. It refers to the methods utilized by the leader to inspire the followers towards achieving the organizational objectives as well as their personal goals. The leader may inspire the followers by providing an optimistic view of the organization's future as he or she sets a realistic vision and communicates it effectively to the followers, while providing them with means to achieve set visions. According to Uusi-Kakkuri et al. (2016), by doing so, leaders can motivate followers and add meaning to their work.

Intellectual stimulation is the fourth dimension of transformational leadership; according to Dionne, Yammarino, Atwater, & Spangler (2004), the intellectual stimulation dimension entails the promotion of followers' rationality and intelligence, and motivating them to be innovative in solving problems. Den Hartog et al. (1997) argued that this dimension moves followers to reconsider their own values and beliefs as well as their leaders' values and beliefs, they therefore do not completely confine themselves to the methods provided by the leader. They think of new problem-solving methods and this enables them to solve problems that are missed or unnoticed by the leader (Mekpor & Dartey-baah, 2017).

Individualized consideration is the last dimension of transformational leadership and refers to the consideration of followers as individuals rather than just members of the group (Feng et al., 2016). Here, the leader focuses individually on followers' needs

and encourages them to develop themselves. The leader guides the followers and motivates them to reach their full potential by enforcing an organizational climate that provides opportunities for followers to learn new things.

## 2.9 RELEVANT EMPIRICAL STUDIES

Numerous empirical studies have investigated the intricate relationships between intellectual capital, transformational leadership, job satisfaction, and organizational innovation. For instance, in a several studies Gallego Giraldo & Calderon-Hernandez (2023) Martín-de Castro et al. (2019), Yusliza et al. (2020), the researchers explored the impact of intellectual capital on organizational innovation, emphasizing the mediating role of job satisfaction. The findings suggested that organizations with a higher level of intellectual capital tend to foster greater job satisfaction among employees, leading to increased organizational innovation. This study provides valuable insights into the intricate interplay between intellectual capital, job satisfaction, and the consequent effect on the innovation climate within organizations.

Additionally, the role of transformational leadership in shaping organizational innovation has been extensively examined. In a study conducted by Al-edenat (2018), the author investigated the influence of transformational leadership on job satisfaction and its subsequent impact on organizational innovation. The results indicated that transformational leaders, through their inspirational and supportive leadership styles, significantly enhance both job satisfaction and organizational innovation. By elucidating the mediating effect of job satisfaction, this research contributes to a more comprehensive understanding of the mechanisms through which transformational leadership shapes organizational innovation. These empirical studies collectively

underscore the significance of intellectual capital, transformational leadership, and job satisfaction as critical determinants in fostering a culture of innovation within organizations.

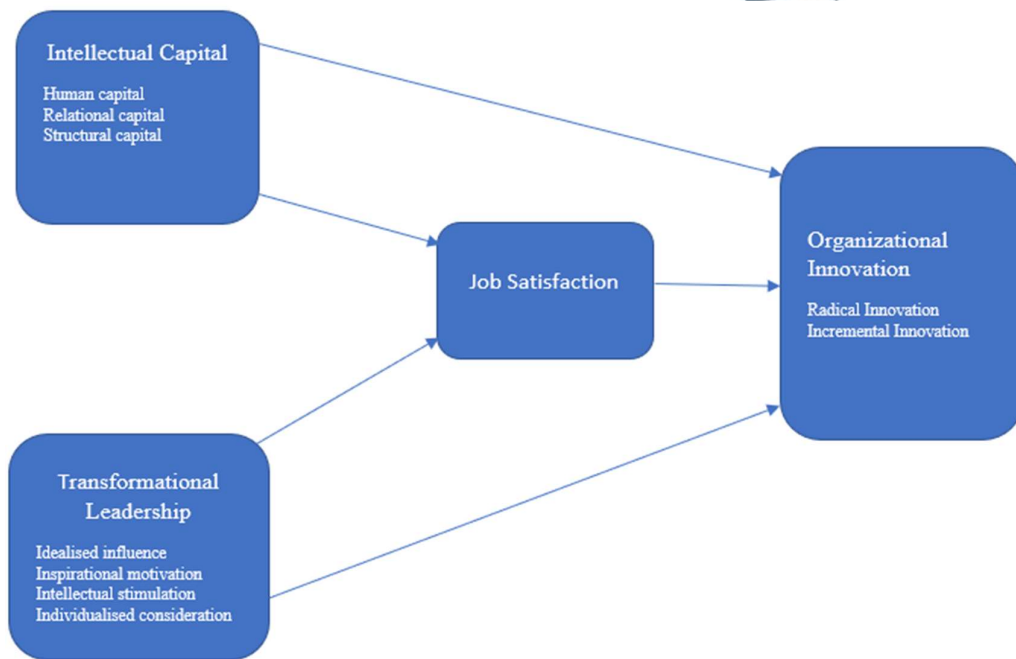
Agostini, Nosella, & Filippini (2017) conducted a research on the role of intellectual capital on innovation among SMEs in Italy which proved the significance of that relationship. Similarly Dost, Badir, Ali, & Tariq (2016) studied the same relationships in their study in Thailand and concluded the same significance of human capital and relational capital in determining innovation.

Furthermore, a study in China which focused on the impact of transformational leadership on innovation (Chen et al., 2016b) among Chinese firms found out that transformational leadership is significant to enhance innovation. Moreover, Sönmez & Yıldırım (2019) conducted a study in the healthcare industry in Turkey to examine the moderating role of job autonomy among nurses in two university hospitals and found that job autonomy has a statistically significant moderating role in the examined model.

## **2.10 CONCEPTUAL FRAMEWORK**

Wu et al. (2008) asserted that intellectual capital can support a firm's level of innovation. Chen et al. (2006) emphasized that human capital can impact positively on the performance development. Based on the resource-based view and resource dependence theory, this study built the main relationship between intellectual capital and organizational innovation. Besides, transformational leadership was derived from leadership model postulated by Ngadiman, Eliyana, & Ratmawati (2013). Moreover,

based on the previous literature, this study examined the mediation effect of job satisfaction on the relationship between intellectual capital and transformational leadership in one side and organizational innovation on the other. Thus, with the consideration of all the above, a research framework as shown in figure 2.2 below is developed:



**Figure 2.5:** The proposed conceptual Framework

## 2.11 RESEARCH HYPOTHESES

The study develops and proposes 7 main research hypotheses, whereby there are five direct hypothesis and two indirect hypothesis (mediation hypothesis) to achieve the objectives of the study which are stated as follows:

- H1: Intellectual capital has a positive effect on organizational innovation among Fujairah Police Employees in UAE.

- H2: Transformational leadership has a positive effect on organizational innovation among Fujairah Police Employees in UAE.
- H3: Intellectual capital has a positive effect on job satisfaction among Fujairah Police Employees in UAE.
- H4: Transformational leadership has a positive effect on job satisfaction among Fujairah Police Employees in UAE.
- H5: job satisfaction has a positive effect on organizational innovation among Fujairah Police Employees in UAE.
- H6: Intellectual capital has a positive indirect effect on organizational innovation through job satisfaction among Fujairah Police Employees in UAE.
- H7: Transformational leadership has a positive indirect effect on organizational innovation through job satisfaction among Fujairah Police Employees in UAE.

## **2.12 CHAPTER SUMMARY**

This chapter has provided a review of literature related to the current study. This review intended to provide a comprehensive understanding of the current and previous issues. Relevant theories and models along with empirical studies in the field have been highlighted, besides conceptual framework has been illustrated with all its variables discussed in detail including independent, dependent, and mediating variables. Finally, the chapter concluded with the research hypotheses development.