AMERICAN UNIVERSITY OF BEIRUT

GENDER AND THE LEARNING ORGANIZATION

by
REMY FAWAZ TAHER

A project
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for the degree of Master of Human Resources Management
to the Suliman S. Olayan School of Business
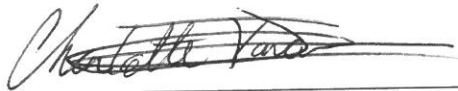at the American University of Beirut

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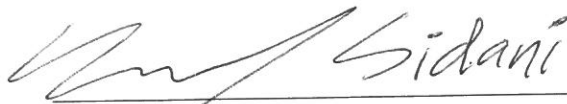GENDER AND THE LEARNING ORGANIZATION

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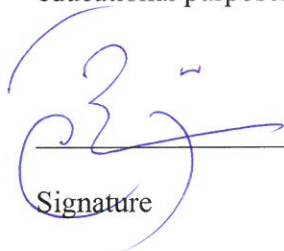
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AN ABSTRACT OF THE PROJECT OF

Remy Fawaz Taher   for   Master of Human Resources Management
Major: Human Resources Management

Title: Gender and the Learning Organization.

The intent of this field project is to discuss attitudes toward variant aspects of the learning organization and to explore the possible differences between female versus male perceptions of the learning organization within private Lebanese organizations. Becoming a learning organization is a status that many organizations seek, as it is associated with better organizational performance and competitiveness. In order to offer better products and services and achieve competitive advantages, many Lebanese firms are turning to establishing processes foundational for learning organizations. The implementation of such policies and strategies involves ensuring that employees can benefit from learning opportunities without gender-based discrimination. A quantitative methodology was carried out for this study, whereby 200 surveys were distributed among employees from various Lebanese organizations. A survey specifically designed for this paper was adopted to test the proposed hypotheses. Along with the quantitative data collected, this collection tool (the questionnaire) used to collect and quantify non-quantitative data. In practice, statements proposed for the measurement of various variables. The answers to these statements in the form of Likert scales enabled us to quantify non-quantitative data. The data collected from the survey was analyzed using statistical software SPSS to produce the necessary descriptive statistics, inferential statistics, validation test of scales, and hypothesis test.

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To

My Beloved Family

CHAPTER I

INTRODUCTION

Current titles in the managerial literature often refer to knowledge and information technologies, which can, through creative and innovative methods, significantly impact an organization's strategies, business direction and position in the market. For example, the increasing use of online systems in the banking sector has opened doors to increased knowledge sharing opportunities and occasions for streamlining banking procedures for customers and employees alike. An exemplary case of an innovative concept is the launch of Bank Audi's "NOVO" branches that offers its customers interactive solutions for a comfortable and user-friendly banking experience. This innovation uses the latest technology in the banking industry and embodies a new definition of retail banking in the market. Here we see the embracing of learning to push innovation in banking forward. Organizations as well as their management practices need to be continuously evolving, due to economic, technological and social changes as well as globalization and the competitive business environment. Not learning will leave organizations behind.

One answer of management scholars to this challenging environment is the development and elaboration of the new management concept of the learning organization. By definition, learning organizations are "organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together" (Senge, 1990, p.14). In effect, every learning organization focuses on the importance of empowering and

investing in its human resources by offering them the best access to knowledge in order
to enhance their productivity and benefit from their full capacities.

   In the current field project, we explore the topic of the learning organization
within the Lebanese context generally to further identify whether there exist differences
between men and women and their perceptions of the learning organization. Essentially,
this research attempts to answer the following research questions: To what extent are
Lebanese private sector organizations perceived by their female versus male employees
to be learning organizations? Are there gender differences in terms of company
employees' perceptions of the various dimensions of the learning organization?

   In the section that follows, we begin with an in-depth review of the existing
literature concerning the concept of the learning organization and the differences
witnessed in learning organizations between men and women. We then present our
research methodology and the survey used to highlight on perceptions of the learning
organizations among employees in Lebanese organizations.

CHAPTER II

LITTERATURE REVIEW

Learning Organization Definition

Defining the term "learning organization" proved to be difficult while consulting previous literature, given the different variables in the definitions and the often-confusing nuances. In her article, He-Chuan Sun (2003) collected definitions proposed by well-known authors for the learning organization such as Baker &Camatra (1998), Marsick &Watkins (1999), Pedler (1991) and Senge (1990) as shown in the table below:

Table 1

Collected Definitions by He-Chuan Sun

Author	Definition
Baker and Camatra (1998)	A learning organization provides a stimulating climate for its members in which they continually strive for new approaches to the acquisition of knowledge (p. 163).
Marsick and Watkins (1999)	The learning organization is a, living, breathing organism that creates the space that enables people and system to learn, to grow, and to endure (p. 164).
Pedler (1991)	A learning company is an organization that facilitates the learning of all its members and continuously transforms itself (p. 164).
Senge (1990)	A learning organization is where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together (p.14).

In their attempt to define the characteristics of the learning organization and its importance, Mills & Friesen (1992) propose that in a fast evolving world organizations not only need to learn, but should do it fast enough to avoid staying behind competitors. In order for a learning organization to be characterized as such, it should imperatively be devoted to knowledge and should implement a system to remain up-to-date and also create links with the external environment to acquire new knowledge. In order to reach this status, the learning organization should be flexible in terms of structure and pragmatic in terms of human resource fit. In other words, the learning organization prompts its human capital to learn in order to better fit in and bring added value to their jobs; and rewards them for doing so (Mills & Friesen, 1992).

Based on those various definitions, we can find three types of definitions of a learning organization: 1) the present participle type (e.g. continuous learning or transforming); 2) the gerund type (e.g. climate, culture, learning environment); and 3) the integrated type (covering the characteristics of both the present and the gerund types). For the purpose of this study, the definition adopted throughout this research is developed by Senge (1990) and belongs to the latter integrated group. That is: "organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together" (Senge, 1990, p.14).

Types of the Learning Organization

While most authors describe and qualify organizations as learning according to one or other specific criteria – organizational learning, learning at work, developing a learning climate, and creating learning structures, Ortenblad (2004) suggests more

specifically that a full learning organization should have all four of these aspects to be qualified as such. If it's not the case, they should be called "partial learning organizations" (Ortenblad, 2004, p. 141). In his analysis, Ortenblad proposes that, with respect to firm characteristics, not every learning organization necessarily needs to have all four aspects but insists that the qualification of such organizations should specify which learning aspect they possess.

For a better understanding, Ortlenblad (2004) highlights the characteristics of each type of learning organizations. In the first aspect *organizational learning* requires employees to be prepared for different levels of learning based on the knowledge that is stored and available within the organization. In this case, what each individual learns is stored in the memory of the organization, for example standard operating procedures, shared mental models, and documents (Hedberg, 1981), thus making the learning and knowledge organizational. The second type, *learning at work* allows employees to learn on-the-job, or what is also known as "on-the-job learning." This aspect of the learning organization views learning and knowledge as context-dependent and offers two opportunities for learning to take place; formal and informal. Formal learning occurs through the integration of information technology in processes, vocational training, and in knowledge management systems. This form of learning plays a limited role in learning however; because of the difficulty in applying theory to practical work (Kolb, 1984; Revans, 1998).Informal learning, on the other hand, occurs when learning opportunities arise by performing the job responsibilities (Watkins & Marsick, 1993). In this case knowledge can be more readily applied to further action when learning takes place during the work situation (see Kolb, 1984; Revans, 1998).

In the third aspect, *learning climate,* an organization facilitates the learning of its individuals by creating an atmosphere that makes learning easy and natural. The

organizational learning might be stimulated by an atmosphere that encourages loyalty among employee and the individuals must be prepared to share their knowledge with co-workers. Finally, in the fourth aspect (Watkins & Marsick, 1993), *learning structure*, the learning organization is characterized by a double flexibility. The first includes flexibility in the coordination and division of labor, facilitated by the establishment of teams and a flat organizational structure (Senge, 1990; Marsick & Watkins, 1993), thus enabling the distribution of knowledge and learning opportunities in formal and informal teams. The second entails flexibility in the management of power and decision-making, resulting in a decentralized organization and the empowerment of employees (Garavan, 1997). The distribution of power in the learning organization can be contrasted with the traditional organizational forms, in which management does not meet the principles of hierarchy control and power concentration.

Learning Organization: Fifth Discipline Components

Transforming companies into learning organizations is highly problematic and creates huge challenges. To override these challenges, organizations need to understand how to gain commitment of people at all levels and continually expand their capacity to learn to create their own future (Senge, 1990). Senge (1990) suggests that learning organizations learn to innovate constantly by practicing and paying attention to the following five components. The first component, *System Thinking*, is a framework that deals with problems effectively and makes complex tasks easier without the ability to lose interaction and sustain a competitive advantage. These interactions allow the organization to adapt to changes in the outside world and makes realities more manageable. The second component *Personal Mastery* is defined by three important elements; personal vision, creative tension, and commitment to truth. Senge views

personal vision as being accompanied with a sense of purpose (e.g. want a bigger market share to be more profitable to keep the company independent). The creative tension element is the way to resolve the gap between reality and vision by generating energy to make change happen (e.g. we want to start a company but we don't have the capital). And commitment to truth leads to the ability to change structure and seek desired results with the high degree of commitment it involves.

The third discipline component is *Mental Model*, which fundamentally governs how we make sense of the world, how we perceive the actions of others and in turn, how we behave. These mental models limit us to familiar ways of thinking and acting. That is why managing and discovering them, testing their validity and improving them, can become a breakthrough concept for learning organizations (Senge, 1990). The fourth, *Shared Vision* is when the visions of the organizational members come together. This is an important factor for learning organizations to provide focus and energy for employees and bring not only commitment, but also new ways of thinking and acting, where the goal is to align personal visions with the organizational vision. Finally *Team Learning* is relationship-oriented and based on a shared vision where team members build trust, identify individual strengths, understand the system in which they operate and how they can influence it, and aim for higher goals to produce better outcomes.

By adopting these components, in practice, a learning organization becomes a process whereby managers promote learning as a key part of the organization's culture, by encouraging employees to be open to new ideas, solve problems and communicate more effectively, understand how their companies operate, form a collective vision and work together to achieve their goal (Senge, 1990).

Learning Organization: Framework and Measurement Tools

To take Senge's fifth discipline further, Watkins & Marsick (1993, 1996) integrate a new theory and principle into the task of organizational learning. They believe that the strategic orientation of the organization is a key variable for creating learning organizations, which are embedded within four dimensions (individual, team, organizational and societal). Furthermore, Watkins & Marsick suggest that within the framework of organizations, internal and external changes have created operational environments. These changes require an organization to create a flexible and adaptive workforce, that exercises and maintains a learning focus through six strategic training actions:(a) creating continuous learning opportunities, (b) promoting inquiry and dialogue, (c) encouraging collaboration and team building, (d) establishing systems to catch and share learning, (e) empowering people toward a collective vision, (f) connecting organization to its environment (Watkins & Marsick, 1993).

Evidently, this framework overlaps in many ways to Senge's suggested learning organization components, such as having shared vision and encouraging team collaboration. However, what differs with Watkins & Marsick's framework is the logical and comprehensive explanation of the learning organization from an organizational culture standpoint that further encompasses the individual, team, organizational, and societal levels. Moreover, this model is unique in not only classifying the key features of the learning organization, but also combining these features and identifying their interactions.

Organization Learning and Organizational Performance

As we have seen in Senge's disciplines and Watkins & Marsick's framework, various learning organization features affect organizational outcomes, namely in terms

of coping with change, fast product or service launching, and underlying organizational

performance (Kontoghiorghes *et al*., 2005). For example, statistical results have shown

that organizations who promote extensive communication and information exchange,

encourage employees to be innovative, and provide the resources to accomplish their

tasks, tend to cope better with change and fast product or service launching

(Kontoghiorghes *et al*., 2005). Other researchers have proposed a model linking

learning organizations and organizational performance. Based on these models, learning

organizations at the individual, team and organizational levels (Watkins &Marsick,

1993) can promote innovation (Calantone, Cavusgil, & Zhao, 2002; Ramus & Steger,

2000) and knowledge transfer within organizations (Jiang & Li, 2008), which in turn

helps to improve organizational performance.

There are several advantages to building a learning organization that aim to

improve organizational performance. One advantage is when employees have *increased*

adaptability and are able to deal with environmental changes, while at the same time

boost their level of innovation linked to work processes, products and technological

purpose (Marquardt, 2002; Senge, 1990; Watkins & Marsick, 1993). Another advantage

is the organization's *increased commitment* whereby employees adopt organizational

goals and values (Atak & Erturgut, 2010) as a result of learning organization. This

aspect of having shared goals was found to be a key feature in both Senge's and

Watkins & Warsick's model as well.

The third advantage to building a learning organization to improve

organizational performance is a *company's competitiveness*. According to Hor, Shih &

Lee, "continuous-changing environment, uncertain business conditions, and

competitors exist everywhere in today's business world, make organizations change and

adapt themselves rather than continue to use a stable or a single way to cope with new

business environment" (Hor, Huang, Shih, Lee, & Stanley Lee, 2010, p. 531). In other words, a learning organization can provide its employees with relevant and efficient knowledge to deal with new situations to stay competitive in the business world.

The fourth advantage refers to *increasing organizational knowledge* whereby learning organizations help to gain, analyze, store knowledge within the organization and provide quick access to employees who are facing problems (Garvin, 2000; Marquardt, 2002). This ties into the next advantage where learning organizations invest in the *professional growth* of the employees by providing opportunities and resources to encourage them to stay up-to-date with latest knowledge and new skills to better develop innovative ideas (Marquardt, 2002; Senge, 1990; Van Deusen & Mueller, 1999). With this kind of investment, employees are indirectly contributing to *increasing profitability*, the sixth advantage. A learning organization can improve the performance of organizations (Ellinger, Ellinger, Yang & Howton, 2002) by improving quality of productivity at all levels (Vargas-Hernández *et al*., 2010). Finally, learning organizations can *retain their customers* by providing skills, competencies and a proper working environment that meets their needs and requirements and ultimately attract new customers in the marketplace (DiBella & Nevis, 1998; Nevis, DiBella & Gould, 2000).

In this context, organizations seeking stronger performance need to emphasize such features along with the efforts in terms of knowledge acquisition and sharing according to its human capital. As the research suggests, an organization that reaches better performance is the one that encourages its employees to innovate, share knowledge and information, and implement the necessary tools for such behavior and process.

The Social Context of Organizational Learning

As organizational learning suggests, knowledge that is stored or stocked within the organization's human resource, can contribute to value creation (Argote & Ingram, 2000; Cool, 1989). As any kind of stock, knowledge stock needs to be managed and continuously renewed. This is done by acquiring new knowledge from the firm's external environment and sources of information (e.g., suppliers, partners, customers, etc.), as well as sharing existing internal knowledge between employees and managers(see Appendix I).Two types of organizational learning are identified in the literature as (1)exploratory (2) exploitative (Sung-Choon *et al.*, 2007). While the first type aims for knowledge that is new to the organization, the second type aims for developing and elaborating on the organization's current knowledge. Nevertheless, both types of organizational learning are incumbent for the organization (Sung-Choon *et al.*, 2007).

To further develop the meaning of knowledge in this context, the literature highlights two groups of knowledge: component and architectural. Component knowledge refers to the knowledge of "parts", where firms follow exploratory learning in a new domain, and find that it is necessary for employees to know enough about the content domain of their partner's and are able to apply it to follow commercial needs.

Architectural component, on the other hand, refers to the knowledge of "whole" component. It is an interconnection of all components and how they fit together. In the context of exploitative learning, continuous organizational improvements such as product development, involve the effort and coordination of different parties. It is through these types of cognitions employees can integrate their own knowledge with others. In other words, employees share or exploit existing knowledge that affects the interconnection of the whole component.

Role of Human Resources Management in Promoting Organizational Learning

Both types of knowledge or information sharing are imperative and essential for a firm's human resources management (HRM) (Leonard-Barton, 1995). Many authors emphasize that social interaction is the ultimate tool to efficiently attain knowledge sharing and flow (Kale *et al.*, 2000; Nahapiet & Goshal, 1998; Grant, 1996; Kogut & Zander, 1992). Previous research also argues that HRM practices play the role of a catalyst in developing, encouraging, and boosting this valuable social interaction between employees (Adler & Kwon, 2002; Dyer & Nobeoka, 2000; Leana & Van Buren, 1999).

Human resources (HR) practices can be tactically applied to promote relational models between the various groups of HR architecture. As such, there are three main practices involved (Sung-Choon *et al.*, 2007). First, the work layout guides HR to cooperate to achieve the overall mission. Second, involves the motivation stimulating HR to seek and acquire new knowledge. Last, involves competency improvement by means of training with the main objective of boosting human resources' aptitude to apply acquired knowledge (Sung-Choon *et al.*, 2007). HRM can catalyze the cooperative model using interconnected work designs, strategies promoting group formation, and extensive competency improvement. It can also stimulate the entrepreneurial model by means of elastic and versatile work designs, result-cased incentives, as well as the formation of multi-skills (Sung-Choon *et al.*, 2007).

However, as mentioned earlier, in order to be a learning organization, the organization needs to adapt its HR architecture and HRM policies to promote learning. It should be noted that implementing such policies and strategies means that the organization would be offering this advantage to its human resources without any kind of discrimination (e.g., gender, ethnic group, hierarchical job position etc.). This point

leads to the fundamental aspect of our field project, which highlights the gender differences and perceptions on learning organization.

Gender: Theoretical Perspectives

In this section, light is shed on the differences witnessed in learning organizations between men and women. The objective is to review the existing literature on the gender differences within the knowledge sharing environment in learning organizations. What we discovered is in fact a few studies reflected on the relationship between gender and knowledge in organizations (Truss *et al*., 2012; Ragins & Sundstrom, 1989; Caglar, 2010; Bunderson & Reagans, 2011; Lee-Gosselin *et al*., 2013).

In order to better understand the concept of gender, we are going to highlight two theories that can assist us in better linking gender and knowledge sharing in organizations. That is, we explore two theoretical points of views that could help explain this relationship; namely the Social Categorization Theory (SCT) and the Value in Diversity Perspective (VDP) (Ely & Thomas, 2010). With regards to knowledge sharing, SCT would predict that difference in demographic characteristics such as gender, could function as a barrier to interaction (Lu & Murnighan, 1998). In heterogeneous groups, it would be a possibility to form groups based on specific characteristics which could create boundaries between the knowledge sharing and as a result create less interaction in a group (Levin & Cross, 2004; Johnson & Lederer, 2005). While VDP refers to the fact that the inclusion of diverse perspective adds value, enhances group creativity and increases resources in the form of knowledge and skills (Lauring & Selmer, 2012).

James (2013) argues that there is a definable relationship interlinking gender

and learning organizations.   He roots his arguments in the theories of learning

organization that link gender with organizations. In addition to SCT and VDP, there are

other theories that try to explain the relation between gender and learning organizations.

They include cognitive theory, skill based theory and the affective theory. These

theories explain the relevance of learning in an organization to enhance innovation as

well as productive ideas. Cognitive theory brings in the aspect of mental processes

which are affected by extrinsic and intrinsic factors. That enhances the idea of learning

in an individual, factored by mental processes. The theory applies most when it comes

to theoretical learning in the organization and less when it comes to practical. Unlike

cognitive theory, skill-based theory is more of practical than theoretical. As its name

suggests, this are skills gained in the process of daily activities within an organization.

At times it is referred to as the second language acquisition theory and usually based on

cognitive psychology models (James, 2013). Affective theory is well termed by

organizational people as affective events (AET) which happens to be a model

introduced by organizational expert known as Howard M. The theory is based on the

moods and emotions that influence job satisfaction as well as job performance. It shows

the central impact of emotions to employees. Managers ought to understand how

employees are eventually influenced emotionally by work events.

Women in Learning Organizations

Large-scale studies show that, in most scientific and innovation sectors, women

are likely to be congregated into inferior positions that are frequently temporary and

holding nonessential jobs with rare promotion possibilities (Walby, 2011). Women also

tend to be paid significantly less than men (Walby, 2011).Small-scale studies have

associated female employees' underprivileged situation in such organizations with

influencing factors on the level of standards and structure (Jha & Welch, 2010).The mixing of competence, gender and knowledge may occur in the course of daily professional activities and through the organization that separately classify male employees' (e.g., established) functions and female employees' (e.g., secondary) functions, through which the first group has the tendency to enjoy access to professional improvement training and progress openings (Wood, 2008). The weaker presence of female employees in superior positions signifies that they may also be short of access to significant working groups and female trainers (Jha & Welch, 2010).

Gender differences in opportunity classification have been linked to differences in human capital variables including education and work experience, with men documented to leverage significantly higher levels of prior industry or entrepreneurial experience as well as experience in managing employees than women (Carter &Brush, 2005; Carter & Williams, 2003; Boden & Nucci, 2002). The evidence generally suggests that women have less human capital, which negatively impacts their opportunity identification and exploitation potential (Jamali, 2009).

A good example is a sample survey conducted on Lebanon organizations. 200 individuals were interviewed to determine the existing relationship between gender and learning organization (Dirani, 2007). The survey included middle managers working within the greater Beirut. Results show that women within learning organizations tend to be half of men within the same situation. Social factors like family issues hinder women from concentrating with learning organization. Therefore learning organizations should not rely more on educating women as   they can do to men. Dirani's research on women and learning organization results into numerous outcomes on how women are degraded in organizations. The environment they tend to work in is totally not conducive for them to develop mentally and also emotionally. Women in Lebanon are

seen as inevitable to change and hence they have to go no supporters when it comes to learning organization. That becomes the reason as to why they are rated low at work place.

Relating Gender Work Experiences to Differences in Learning Organizations

The suggestions made by large-scale studies about the over representation of women in marginal jobs in intensive knowledge sharing organizations infer that men are more likely to have advanced knowledge sharing work than women. Knowledge work, which is alleged to have the benefit of superior rank and authority, may be correlated with concepts of maleness, whereas inferior rank, service-aligned jobs are correlated with concepts of womanliness (Kelan, 2008).The sharing of knowledge includes expected value, learning and collaboration potential which derive from an atmosphere of trust and teamwork founded on shared protocols and language (Collins & Smith, 2006). Nevertheless, the literature on the experience of female employees at work put forward that the latter's access to these shared protocols, unlike men, may be constrained by obstacles of structure because of the small number of women in the superior levels weak internal work-teams (Durbin, 2011).

Further research reveals that gender diversity inside teams has the tendency to influence unconstructively knowledge formation and sharing activities (Lauring & Selmer, 2012). Implicit and explicit knowledge thus should not be considered as a neutral concept, but as implanted in broader activities of differentiating between men and women. Consequently, a presumption is that female employees have less chances or openings than men to take part in knowledge sharing activities.

Similarly, studies focusing on gender and innovation stipulate that female employees have more tendency than male employees to be eliminated from possibilities

and openings to take part in collective interactions related to innovation (Crowden, 2003). Furthermore, the presumption that female employees working in knowledge intensive jobs have equal credentials and knowledge to those of male employees, but they are likely to be crowded in nonessential jobs that impede knowledge sharing or innovation, subsequently it can be presumed that the women's degree of ability-job fit tend to be inferior to the degree of male employees.

Based on the findings in the literature regarding learning organizations, specifically their characteristics and features, and the gender perceptions of these organizations, we suggest the following main hypothesis (H) and sub-hypotheses (*Ha, Hb, etc.)* for the current research:

H: Female employees have lower perceptions of their organization's learning dimensions than male employees.

Ha: Female employees have lower perceptions of their organization's "continuous learning" dimension than male employees.

Hb: Female employees have lower perceptions of their organization's "inquiry and dialogue" dimension than male employees.

Hc: Female employees have lower perceptions of their organization's "team learning" dimension than male employees.

Hd: Female employees have lower perceptions of their organization's "embedded system" dimension than male employees.

He: Female employees have lower perceptions of their organization's "empowerment" dimension than male employees.

Hf: Female employees have lower perceptions of their organization's "system connection" dimension than male employees.

Hg: Female employees have lower perceptions of their organization's

"strategic leadership" dimension than male employees.

CHAPTER III

RESEARCH METHODOLOGY

Research Question

The objectives of this project are to explore the following:

- To what extent are Lebanese private sector organizations perceived by their female versus male employees to be learning organizations?

- Are their gender differences in terms of company employees' perceptions of various dimensions of the learning organization?

Research Design

The current research focused on Lebanese private sector companies and explores the relationship between gender and aspects of learning within organizations. More specifically our intent was to investigate the possible differences between women and men as members of a learning organization and to quantitatively measure employees' perception on chosen variables, specifically: Continuous Learning, Inquiry and Dialogue, Team Learning, Embedded System, Empowerment, System Connection and Strategic Leadership.

The practical section of these study consisted of surveys filled by a sample of employees from Lebanese private companies. The sample included employees from different levels and positions using multivariate techniques to verify the research hypotheses. The purpose of the study was clearly explained to all participants and that their contribution in the study was voluntary and that no penalty would be imposed in case they refuse to participate or withdraw from the study. All the data and surveys

filled were confidential.

Sample

   Sample Framework: Data was collected through surveys addressed to business

professionals in various Lebanese organizations. The sample size was a total of 200

subjects (100 women & 100 men) drawn from multiple organizations in the greater

Beirut area (included senior managers, middle management, supervisory, non-

management).

Recruitment Process

   The recruitment process was through email. The email addresses of the

employees were gathered through publically visible connections on Linked In. I

contacted them individually. All the participants were sent a written consent form and

the questionnaire. The form was used to explain to the respondents the purpose of this

study and the importance of their contribution. All participants were informed that they

could simply ignore the email.

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Research Measurement

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   To assess each of these variables and to be able to test the hypotheses, we

relied on previous validated scales prominent in the literature. The first part of the

questionnaire was designed to obtain demographic information. Participants were

asked to complete a page of question regarding their level of education and their

background. The second part of the questionnaire consisted of a scale adopted from

Watkins & Marsick (1993, 1996) to measure the perception of gender on the learning

organization's dimension. This theoretical framework suggested by Watkins & Marsick

(1993, 1996) comprises learning organization dimensions at all levels (individual, team,

organizational and system) and identifying their interactions. The specific survey

questions therefore were all close ended with answer options on a Likert scale ranging from 1 to 5, where 1 is strongly disagree and 5 is strongly agree. Lime Survey hosted by APSC was used as the online methodology.

Key Variables: Sub-dimensions of the Learning Organization

Continuous Learning; The first sub-dimension of the learning organization was continuous learning and is intended to help learn about the perception of respondents of their organization's effort to generate continuous learning opportunities for all of its members. The subscale was developed and validated by Watkins & Marsick (1993, 1996).

Inquiry and Dialogue; The second sub-dimension measured the organization's effort in creating a culture of questioning, feedback, and experimentation. The sub-dimension was developed and validated by Watkins & Marsick (1993, 1996).

Team Learning; As for the third sub-dimension, it focused on the perception of employees' of the spirit of cooperation and the collaborative abilities that support the successful use of teams. Watkins & Marsick (1993, 1996) also developed and validate this sub-dimension.

Embedded System; Concerning the "Embedded system" sub-dimension, it was used to know to which extent the respondents' organizations put efforts to set up systems to capture and share learning. The sub-dimension was developed and validated by Watkins & Marsick (1993, 1996).

Empowerment; The next sub-dimension w referenced the autonomy level given by organizations or employees and the method to generate and share a group vision and get opinion from its members about the gap between the present position and the new vision. The sub-dimension was developed and validated by Watkins & Marsick (1993,

1996).

   System Connection; "System connection" was used to measure the level of

global thinking and measures to hook up the organization to its internal and external

environment. The sub-dimension was developed and validated by Watkins & Marsick

(1993, 1996).

   Strategic Leadership; Last but not least, "Strategic leadership" was a sub-

dimension used to measure the extent to which leaders reflect strategically about the

way to exploit learning to produce change and to move the organization in new

directions or new markets. The sub-dimension was developed and validated by Watkins

& Marsick (1993, 1996).

Data Analysis

   The collected data was analyzed using the statistical software SPSS. We tested

for validity using inferential statistics, validation tests of scales, and hypotheses tests.

After collecting the information, we tested their reliability using Cranach's α, as well as

determining the validity scale of the measures for each of the variables of interest. We

utilized both correlation and regression analysis using the SPSS statistical tool.

CHAPTER IV

RESEARCH FINDINGS AND ANALYSIS

This section displays the statistical results and findings of this. These results are logically organized in four sections: descriptive statistics, validity of scales, inferential statistics, and test of hypotheses.

Descriptive Analysis

In practice, the number of usable surveys was equal to 198. The descriptive statistics have shown that, in our sample, 56.63%of participants are males while 43.37% are females (See Figure 1, Appendix III). Our sample consists of human resources with different education levels where 46.97% of participants have BA degree, 38.89% MBA or master degree, 8.59% PhD or doctorate and only 5.56% don't have university degrees (See Figure 2, Appendix III).

As for the respondents' job level, 31.28% of participants are in officer level, 26.67% managerial level, 24.62% mid-managerial level and 17.44% at entry level (See Figure 3, Appendix III). Consequently, the respondents have different annual revenue where 33.33% of respondents have annual revenue between 18000 and 24000$, 26.83% between 24001 and 36000$, 26.02% more than 48000$, 13.01% between 36001$ and 48000$ and only 0.81% of respondents have annual revenue less than 18000$ (See Figure 4, Appendix III).

Our analysis has shown that the respondents' average experience is of 8 years (mean = 7.73) and that, in average, the respondents are working for the same employer since 5 years (mean = 5.19) (See Table 1&2, Appendix III). As for the respondents'

marital status, results show that 59.07% of participants are single, 34.72% are married,

4.15% of respondents still kids and only 2.07% are divorced or widowed (See Figure 5,

Appendix III).

Table 2

Descriptive statistics

Gender	Males	<u>56.63 %</u>
	Females	<u>43.37 %</u>
Education	< BA	<u>5.56 %</u>
	BA	<u>46.97 %</u>
	MBA	<u>38.89 %</u>
	PHD	<u>8.59 %</u>
Job Level	Entry Level	17.44 %
	Officer Level	31.28 %
	Mid-Managerial Level	24.62 %
	Managerial Level	26.67 %
Annual revenue	<18.000$	0.81 %
	18.000-24.000$	33.33 %
	24.001-36.000$	26.83 %
	36.001-48.000$	13.01 %
	>48.000$	26.02 %
Experience	Average of 8 years	
Tenure in current company	Average of 5 years	
Marital Status	Single	59.07 %
	Married	34.72 %
	Kids	4.15 %
	Divorced/Widowed	2.07 %

Validity of the Scales

Cronbach's Alpha is a coefficient of reliability. It is commonly used as a

measure of the internal consistency or reliability of a psychometric test score for a

sample of examinees. It was first named alpha by Lee Cronbach in 1951 (Cram101,

2014).This indicator should be greater than 0.7 to consider the internal consistency

between items as strong; if the indicator was weak we can also use the correlation test

between each item and the average of the items for each factor, if the degree of

significance (Sig) was less than the error ratio ($\alpha = 5\%$), then the correlation is

considered valid and no items are deleted.

Table 3

Validity test for "Continuous learning"

Cronbach's Alpha	N of Items	
0.826	3	
		Sig
The system in my organization encourages its people to help each other learn.		0.000
The system in my organization provides all the time needed to support learning.		0.000
People in my organization get rewarded for learning.		0.000

Having a Cronbach's Alpha greater than 0.7 and item significance lower than

the error margin 5%, means that we don't have to remove any item and "Continuous

learning" is now a significant factor for the analysis.

Table 4

Validity test for "Inquiry and dialogue"

Cronbach's Alpha	N of Items	
0.826	3	
		Sig
People in my organization are encouraged and are likely to provide open feedback.		0.000
People in my organization are encouraged and are likely to ask what others think.		0.000
People in my organization spend enough time in building trust.		0.000

Having a Cronbach's Alpha greater than 0.7 and item significance lower than the error margin 5%, then we don't have to remove any item and "Inquiry and dialogue" is now a significant factor for the analysis.

Table 5

Validity test for "Team learning"

Cronbach's Alpha	N of Items	
0.783	3	

	Sig
The work in my organization is designed to use teams to access different modes of thinking.	0.000
In my organization, collaboration is valued and rewarded.	0.000
In my organization, teams are not expected to work together but to learn by working together.	0.000

Having a Cronbach's Alpha greater than 0.7 and item significance lower than the error margin 5%, then we don't have to remove any item and "Team learning" is now a significant factor for the analysis.

Table 6

Validity test for "Embedded system"

Cronbach's Alpha	N of Items	
0.828	3	

	Sig
My organization has all necessary technology to allow and promote information sharing.	0.000
In my organization, lessons learned from training are made available for all members.	0.000
In my organization, all training activities are measured and assessed.	0.000

Having a Cronbach's Alpha greater than 0.7 and item significance lower than the error margin 5%, then we don't have to remove any item and "Embedded system" is now a significant factor for the analysis.

Table 7

Validity test for "Empowerment"

Cronbach's Alpha	N of Items
0.857	3

	Sig
In my organization, members are recognized for taking initiative.	0.000
In my organization, people are involved in setting and implementing a shared vision.	0.000
In my organization, responsibility is distributed so that people are motivated to learn what they are held accountable to do.	0.000

Having a Cronbach's Alpha greater than 0.7 and item significance lower than the error margin 5%, then we don't have to remove any item and "Empowerment" isnow a significant factor for the analysis.

Table 8

Validity test for "System connection"

Cronbach's Alpha	N of Items
0.836	3

	Sig
My organization is well connected to its internal and external environment, thus facilitating information flow and sharing.	0.000
In my organization, people understand the overall environment and use information to adjust work practices.	0.000
In my organization, people are helped to see the effect of their work on the entire organization.	0.000

Having a Cronbach's Alpha greater than 0.7 and item significance lower than the error margin 5%, then we don't have to remove any item and "System connection" is now a significant factor for the analysis.

Table 9

Validity test for "Strategic leadership"

Cronbach's Alpha	N of Items
0.914	3

	Sig
Leaders in my organization provide the necessary mentoring and coaching to their subordinates.	0.000
Leaders in my organization provide their subordinates with opportunities to learn.	0.000
Leaders in my organization try to use learning as a tool to achieve organizational objectives.	0.000

Having a Cronbach's Alpha greater than 0.7 and item significance lower than the error margin 5%, then we don't have to remove any item and "strategic leadership" is now a significant factor for the analysis.

Table 10

Statistical results for the validated variables

	Mean	Mode	Std. Deviation	CV
Continuous learning	3.29	3.67	1.01	30.69%
Inquiry and dialogue	3.19	3.67	1.01	31.66%
Team learning	3.22	4.00	0.92	28.49%
Embedded system	3.36	3.67	0.99	29.47%
Empowerment	3.27	3.33	1.02	31.08%
System connection	3.38	4.00	0.96	28.37%
Strategic leadership	3.42	4.00	1.08	31.52%

According to the results shown in table above, the respondents have expressed, on average, a neutral opinion for the seven factors where the Mean varied between 3.19 and 3.42. The results show also a low dispersion level of opinions (CV<50%).

Inferential Statistics

In this section, we are looking to study the effect of gender, education, job level, annual revenue, experience, tenure and marital status on the validated factors. To study the effect of these variables we used ANOVA test, it's a parametric test used to compare more than two means and to study if the difference is significant or not and the student T-test was applied to compare two means in addition to Pearson correlation, which is an indicator to measure the consistency between two quantitative variables.

In this indicator, possible correlations range from +1 to −1. A zero correlation indicates that there is no relationship between the variables. A correlation of −1 indicates a perfect negative correlation, meaning that as one variable goes up, the other goes down. A correlation of +1 indicates a perfect positive correlation, meaning that both variables move in the same direction together. Usually we consider the correlation strong if r was greater than 0.7. For the interpretation, we compare Sig (Degree of significance) with α (error ratio = 5% i.e. 0.05).If Sig >α, then we consider the difference insignificant and vice versa.

Table 11

Inferential statistics according to "Gender"

	Male	Female	Sig

Continuous learning	3.32	3.27	0.757
Inquiry and dialogue	3.26	3.09	0.274
Team learning	3.28	3.13	0.262
Embedded system	3.43	3.26	0.265
Empowerment	3.38	3.13	0.106
System connection	3.47	3.25	0.117
Strategic leadership	3.43	3.43	0.998

Gender doesn't have any effect on Continuous learning, Inquiry and dialogue, Team learning, Embedded system, Empowerment, System connection and Strategic leadership.

Table 12

Inferential statistics according to "Education"

	Bacc 2 or less	BA/ License	MBA/ Master	PhD/ Doctorate	Sig
Continuous learning	3.40	3.34	3.21	3.39	0.806
Inquiry and dialogue	3.12	3.16	3.27	3.04	0.822
Team learning	3.33	3.26	3.08	3.47	0.364
Embedded system	3.70	3.36	3.33	3.27	0.693
Empowerment	3.33	3.28	3.26	3.25	0.996
System connection	3.52	3.36	3.36	3.45	0.946
Strategic leadership	3.39	3.47	3.34	3.56	0.836

Education doesn't have any effect on Continuous learning, Inquiry and dialogue, Team learning, Embedded system, Empowerment, System connection and Strategic leadership.

Table 13

Inferential statistics according to "Job level"

	Entry Level	Officer Level	Mid-Managerial Level	Managerial Level	Sig
Continuous learning	3.21	3.13	3.36	3.44	0.404
Inquiry and dialogue	3.12	3.22	3.17	3.22	0.964
Team learning	2.98	3.29	3.32	3.23	0.397
Embedded system	3.35	3.33	3.33	3.40	0.983
Empowerment	3.15	3.36	3.29	3.24	0.803
System connection	3.31	3.41	3.32	3.43	0.913
Strategic leadership	3.60	3.30	3.37	3.50	0.602

Job level doesn't have any effect on Continuous learning, Inquiry and dialogue, Team learning, Embedded system, Empowerment, System connection and Strategic leadership.

Table 14

Inferential statistics according to "Annual revenue"

	Between 18000 and 24000 $	Between 24001 and 36000 $	Between 36001 and 48000 $	More than 48000 $	Sig
Continuous learning	3.13	3.31	3.56	3.59	0.282
Inquiry and dialogue	2.96	3.01	3.29	3.48	0.174
Team learning	3.28	3.18	3.19	3.44	0.712
Embedded system	3.42	3.14	3.44	3.52	0.555
Empowerment	3.10	3.21	3.27	3.48	0.564
System connection	3.45	3.26	3.51	3.59	0.595
Strategic leadership	3.37	3.31	3.50	3.70	0.533

For statistical reason and since we have only one respondent with annual revenue less than 18.000$ per year, the comparison didn't include it.Annual revenue

doesn't have any effect on Continuous learning, Inquiry and dialogue, Team learning,

Embedded system, Empowerment, System connection and Strategic leadership.

Table 15

Inferential statistics according to "Experience" (Correlation)

	Sig	Pearson Correlation	Result
Continuous learning	0.173	0.103	No correlation
Inquiry and dialogue	0.777	-0.022	No correlation
Team learning	0.846	-0.015	No correlation
Embedded system	0.538	-0.048	No correlation
Empowerment	0.704	-0.029	No correlation
System connection	0.866	-0.013	No correlation
Strategic leadership	0.943	0.006	No correlation

Experience doesn't have any effect on Continuous learning, Inquiry and

dialogue, Team learning, Embedded system, Empowerment, System connection and

Strategic leadership.

Table 16

Inferential statistics according to "Tenure" (Correlation)

	Sig	Pearson Correlation	Result
Continuous learning	**0.049**	**0.153**	**Weak correlation**
Inquiry and dialogue	0.310	0.079	No correlation
Team learning	0.828	0.017	No correlation
Embedded system	0.879	0.012	No correlation
Empowerment	0.495	0.054	No correlation
System connection	0.379	0.069	No correlation
Strategic leadership	0.836	0.017	No correlation

Tenure doesn't have any effect on Continuous learning, Inquiry and dialogue, Team learning, Embedded system, Empowerment, System connection and Strategic leadership.

Table 17

Inferential statistics according to "Marital status"

	Single	Married	Others	Sig
Continuous learning	3.31	3.29	3.17	0.898
Inquiry and dialogue	3.26	3.09	2.97	0.409
Team learning	3.25	3.18	3.19	0.880
Embedded system	3.40	3.29	3.36	0.773
Empowerment	3.39	3.19	2.61	**0.037**
System connection	3.48	3.28	2.97	0.140
Strategic leadership	3.48	3.39	2.89	0.278

For statistical reason the respondents who answered Divorced/Widowed or Kids were considered as others (frequencies were very low). Marital status doesn't have any effect on Continuous learning, Inquiry and dialogue, Team learning, Embedded system, Empowerment, System connection and Strategic leadership.

Validation of the Hypotheses

In this section, we are testing the validity of the hypothesis H using the same statistical tools used in the inferential statistics by Gender. As for the remaining hypotheses, we are focusing and highlighting the results obtained in the inferential statistics according to Gender in order to bring forward the verdict on these hypotheses' validity for our research sample. In summary, and as you will note below, none of our hypotheses were supported. We nonetheless present each result for each unsupported

hypotheses in turn.

H: Female employees have lower perceptions of their organization's learning

dimensions than male employees

Figure 1

Validation of organization's Learning dimension according to gender
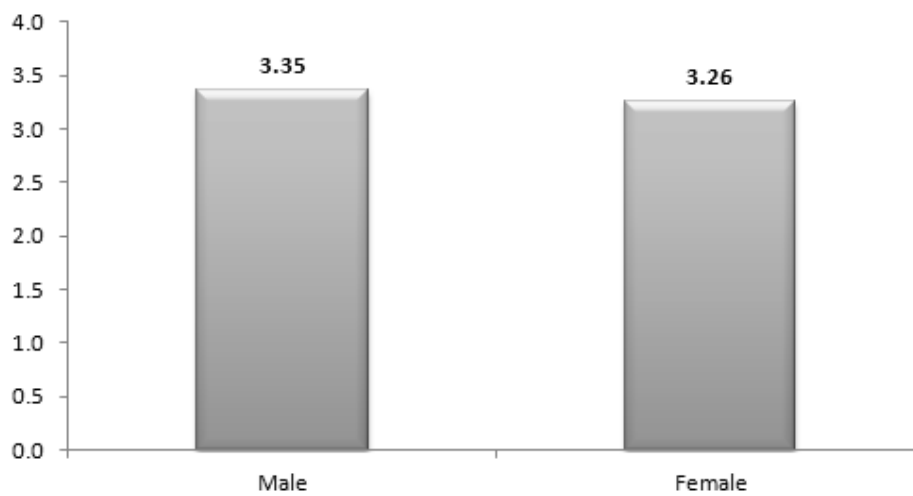
According to the results, female employees do not have different perceptions of their organization's learning dimensions than male employees. That is, the difference was not significant (2.93% less than males result, sig = 0.452 > α). Therefore hypothesis H is not accepted.

Ha: Female employees have lower perceptions of their organization's

"continuous learning" dimension than male employees.

Figure 2

Validation of organization's "Continuous Learning" dimension according to Gender

According to the results, female employees do not have significantly different perceptions of their organization's "continuous learning" dimension than male employees. The difference was not significant (1.53% less than males result, sig = 0.757 > α).Therefore hypothesis Ha is not accepted

Hb: Female employees have lower perceptions of their organization's "inquiry and dialogue" dimension than male employees.

Figure 3

Validation of organization's "Inquiry and Dialogue" dimension according to gender

According to the results female employees do not have different perceptions of their organization's "inquiry and dialogue" dimension than male employees. The difference was not significant (5.50% less than males result, sig = 0.274 > α).Therefore hypothesis Hb is not accepted

Hc: Female employees have lower perceptions of their organization's "team learning" dimension than male employees.

Figure 4

Validation of organization's "Team Learning" dimension according to gender

According to the results female employees do not have different perceptions of their organization's "team learning" dimension than male employees. The difference was not significant (4.79% less than males result, sig = 0.262 > α).Therefore hypothesis Hc is not accepted.

Hd: Female employees have lower perceptions of their organization's "embedded system" dimension than male employees.

Figure 5

Validation of organization's "Embedded System" dimension according to gender

According to the results female employees do not have different perceptions of their organization's "embedded system" dimension than male employees. The difference was not significant (5.21% less than males result, sig = 0.265 > α). Therefore hypothesis Hd is not accepted

He: Female employees have lower perceptions of their organization's "empowerment" dimension than male employees.

Figure 6

Validation of organization's "Empowerment" dimension according to gender
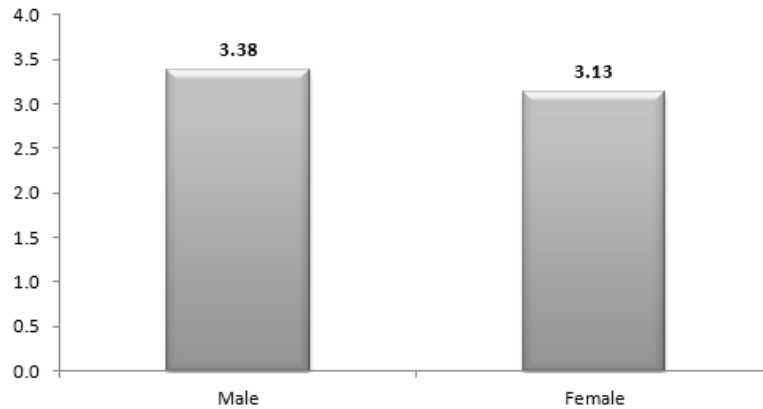
According to the results female employees do not have different perceptions of their organization's "empowerment" dimension than male employees. The difference was not significant (7.99% less than males result, sig = 0.106 > α).

Therefore hypothesis He is not accepted.

Hf: Female employees have lower perceptions of their organization's "system connection" dimension than male employees.

Figure 7

Validation of organization's "System Connection" dimension according to gender
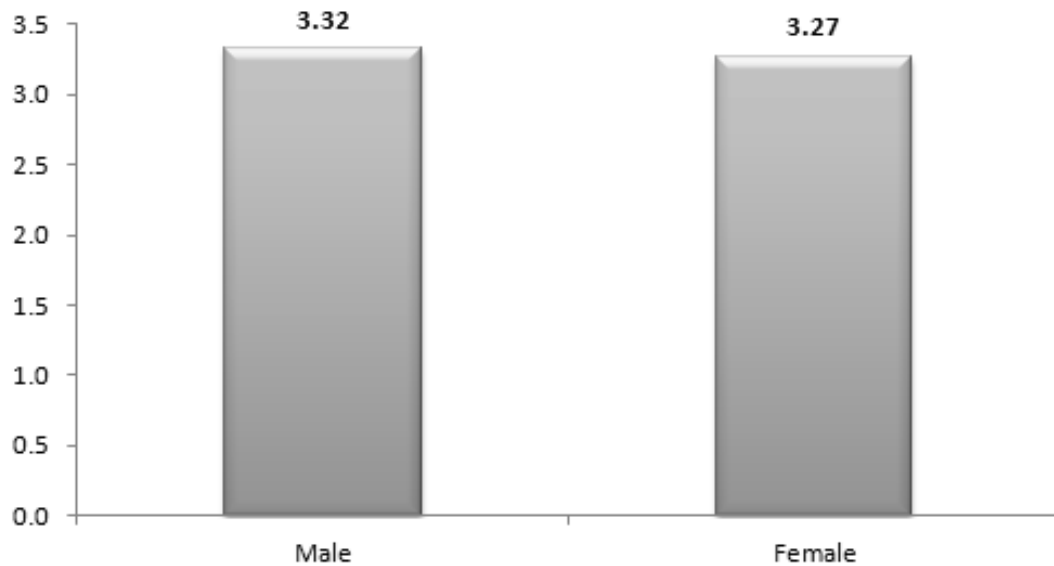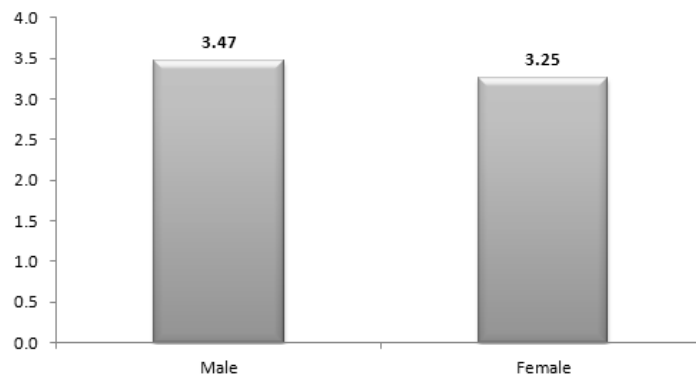
According to the results female employees do not have different perceptions of their organization's "system connection" dimension than male employees. The difference was not significant (6.77% less than males result, sig = 0.117 > α).Therefore hypothesis Hf is not accepted.

Hg: Female employees have lower perceptions of their organization's "strategic leadership" dimension than male employees.

Figure 8

Validation of organization's "Strategic Leadership" dimension according to gender
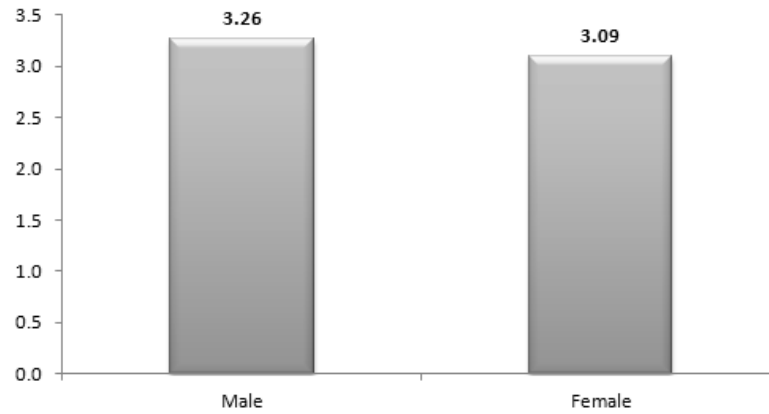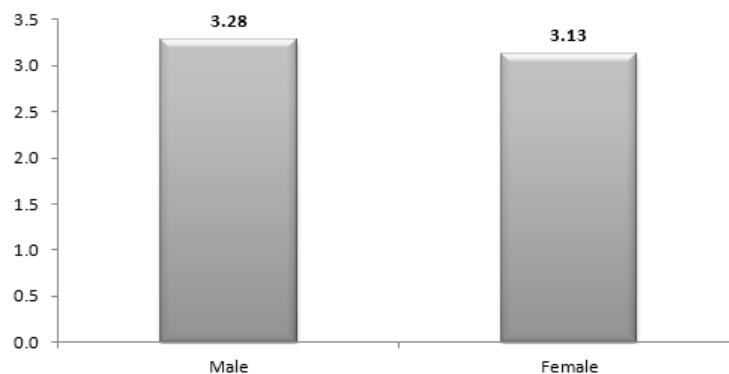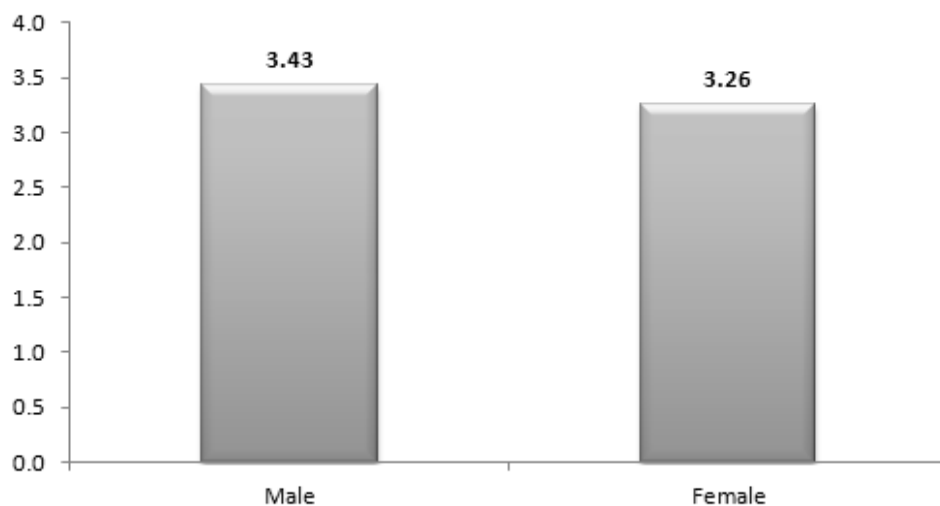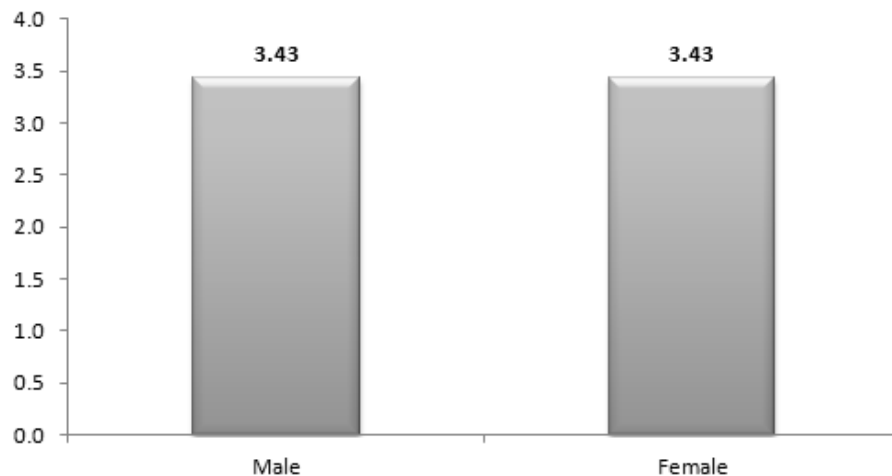

According to the results female employees do not have different perceptions of their organization's "strategic leadership" dimension as male employees; therefore hypothesis Hg is not accepted.

CHAPTER V

DISCUSSION

Main Findings

The contribution that this research brings is twofold: a contribution to literature and a contribution to human resources management practices in Lebanon. To begin with the contribution to literature, the results suggest that learning organization features do not differ according to gender, at least in terms of human resources perception. The survey results suggest no difference in perceptions between female employees and male employees in terms of their organization's learning dimensions. The findings did not support any of the hypotheses.

Human resource management policies combined with relevant practices helps in improving organizational learning and efficient knowledge sharing among the staffs in an organization. Through proper motivation, human resource management helps in guiding employees regardless of gender to focus on teamwork in a bid to achieve the organization's goals. Therefore, it is evident from the results of the study that learning organizational features have no correlation with the diverse genders of the employees. Lawler (2006) argues that through knowledge sharing among all the employees regardless of gender contributes to the continuous improvement both within and outside the organization's framework leading to an increased competitive advantage.

In addition, through sharing knowledge among the employees in an organization helps to cover these gaps and misconceptions that exists between employees genders. This helps on focusing in innovation and improvement of the diverse skills both at the organizational and individuals level (Lawler, 2006). The human resource management

plays a fundamental role in creating new knowledge among all the employees within an organizational framework. In addition, it attracts external stakeholders and collaborators to further enhance the organizational improvement. Through proper equipment of knowledge to both genders in an organization, it helps the organization to adapt to changing circumstances both internally and externally. This helps an organization to modify or rather change their goals and respective strategies. Therefore, this simply projects an increased organizational responsiveness and flexibility.

Therefore, gender and equality are core prospects in an organizational human resource management (Storey, 2009), through enhanced diversity within an organization's framework fosters knowledge sharing and team building, which will improve the performance and contribute to sustainable changes. This proves that through proper human resource management strategies can help manage diversity effectively within an organization closing the gap between gender and learning organization.

On a national level, various countries around the world have developed legislations to govern gender based issues. Contrary to the traditional thinking that organizations stood to gain from discriminating against specific sexes in the workplace, they stand to benefit more by exploiting the varying competencies exhibited by the two sexes. Additionally, the realization that the stereotypical assumptions associated with gender do not hold should be a trigger factor to observe gender equality in organizations. For this reason, learning organization should set up an all-inclusive learning environment that takes care of gender diversity among other diversity issues.

An insight into key principles of learning organization as put forward by Senge gives a better insight into how gender influences the learning organization. For this reason, an activity or decision on one dimension has an effect on another subsystem (Senge, 1990). The systems thinking approach to organizational management provides

an opportunity for long term planning. Relating this to gender, it is importance of human resource management to consider the influences of gender on an entire organization. The use of system's maps is one of the ways in which organizations can be able to identify how the systems connect in the organizations' complexity. The second learning organization dimension is personal mastery (Senge, 1990). This dimension points out to a process where an employee focuses his/ her energy and enhances his/ her vision to the need for continuous learning. This places an ensure organization in a constant state of learning. Personal mastery is triggered by the use of appropriate human resource management practices that create a sense of urgency to learn in the employees.

The third dimension of learning organization is mental models. Mental models are assumptions and generalizations of the desired future or expected future situations (Senge, 1990). These assumptions influence the decision making process. On this point, human resource management should challenge their employees so as to lead to the development of appropriate mental models that are aligned to organizational objectives. Diverse strategies should be used to challenge women and men since they have diverse values as influenced by femininity and masculinity. The fourth dimension is building a shared vision. A shared vision is a great motivator of a workforce towards acting so as to achieve the organizational objectives (Senge, 1990). Creating a shared objective is based on an organization's ability to create an inclusive workplace where all the employees feel part of the future, hence work towards ensuring that they create a good one. Diversity management is one of the effective ways in which human resource managers can create this shared vision. The last dimension is team learning. Team learning is a state where team work is encouraged; such that the collective efforts of all employees lead to the achievement of organizational goals.

Leadership and management have a significant influence on organizational learning. In the wake of the need to consider gender based issues in learning organization, organizational leadership ought to incorporate gender diversity competencies so as to take care of gender related issues (Senge, 1990). Leadership in this context can be linked to human resource management. According to Senge, leaders have three main roles namely; design, teacher and steward. The scope of these roles are developing a shared vision aligned to organizational goals, creating an all-inclusive learning process, coaching and provision of service to organizations with a view creating improvements.

In conclusion, gender diversity is a critical issue in modern human resource management. Learning organizations were identified to be those that are in continuous search for knowledge to improve their performance. It was argued that learning organizations provide good environments on which effective learning takes place. Basing on the five dimensions of a learning organization and the leadership roles in such companies, this study was able to show how human resource management can (and has been) incorporate(ing) gender diversity management competencies.

<div align="center">**Future Research Directions**</div>

As a result, it would be interesting if future research would repeat this investigation and include a larger number of employees, while focusing on a definite economic sector, in order to better understand the relationship between gender, the aspect of learning in private sector organizations, and the impact of each variable on this relationship. Given that all our hypothesis were not accepted, further research can be done to test a positive or competitive relationship between gender and the aspect of learning organization in order to identify the factors that affect this relationship. In

addition it is important to ask the participant in the survey if they are aware about the

policies and the procedures set by their organization in terms of gender differences.

Research Limitation

Like most research studies, this particular study had its own limitations. One of

the major limitations was the issue of timing of survey distribution. The surveys were

distributed at the end of the year when employees are busy with yearend reporting

schedules and holiday events, which did not always make employees available to

answer the survey. Another limitation we encountered was the fact that most employees

were not active on LinkedIn, which led to a low or late response and could have

negatively affected the progress of the study.

Conclusion

This research study was conducted to answer the questions dealing with

Lebanese private sector organizations and the gender difference specifically within this

sector and the learning organizations. The results showed that no difference was found

between men and women and the perceptions of the learning organization.

APPENDIX I

HR ARCHITECTURE


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                        ┌──────────────────────┐
              ┌────────▶│   Value creation      │◀────────┐
              │         └──────────────────────┘          │
    ┌─────────────────────┐              ┌─────────────────────┐
    │ Exploratory learning │              │ Exploitative learning│
    └─────────────────────┘              └─────────────────────┘
    ┌─────────────────────┐              ┌─────────────────────┐
    │    Entrepreneurial   │              │  Cooperative archetype│
    │      archetype       │              │                      │
    └─────────────────────┘              └─────────────────────┘
```

Entrepreneurial HR configuration		Cooperative HR configuration
Flexible work structures	Structural	Interdependent work structures
Result-based incentives	Affective	Clan-fostering initiatives
Transspecialist development	Cognitive	Broader skill development

APPENDIX II

EMPLOYEE QUESTIONNAIRE

Profile

1- Gender:

□ Male   □ Female

2- Education:

□ Bacc 2 or less   □ BA/ Licence   □ MBA/ Master   □ PhD/Doctorat

3- Job level:

□ Entry level   □ Officer level   □ Mid-Managerial level   □ Managerial level

4- Annual revenue:

□ <18.000$ □ 18.000-24.000$ □ 24.001-36.000$ □ 36.001-48.000$ □ >48.000$

5- Experience in private sector (in years): _____

6- Tenure in current company (in years): _____

7- Marital status:

□ Single   □ Married   □ Divorced/Widowed   □ Kids

In the following table, please indicate to which extent do you agree with each of the proposed statements,

Where: 1= Strongly disagree ---- 5= Strongly agree

Dimensions of Learning Organization					
Continuous learning					
The system in my organization encourages its people to help each other learn.	1	2	3	4	5
The system in my organization provides all the time needed to support learning.	1	2	3	4	5
People in my organization get rewarded for learning.	1	2	3	4	5
Inquiry and dialogue					
People in my organization are encouraged and are likely to provide open feedback.	1	2	3	4	5
People in my organization are encouraged and are likely to ask what others think.	1	2	3	4	5
People in my organization spend enough time in building trust.	1	2	3	4	5
Team learning					
The work in my organization is designed to use teams to access different modes of thinking.	1	2	3	4	5
In my organization, collaboration is valued and rewarded.	1	2	3	4	5
In my organization, teams are not expected to work together but to learn by working together.	1	2	3	4	5
Embedded system					
My organization has all necessary technology to allow and promote information sharing.	1	2	3	4	5
In my organization, lessons learned from training are made available for all members.	1	2	3	4	5
In my organization, all training activities are measured and assessed.	1	2	3	4	5
Empowerment					
In my organization, members are recognized for taking initiative.	1	2	3	4	5
In my organization, people are involved in setting and implementing a shared vision.	1	2	3	4	5
In my organization, responsibility is distributed so that people are motivated to learn what they are held accountable to do.	1	2	3	4	5

System connection					
My organization is well connected to its internal and external environment, thus facilitating information flow and sharing.	1	2	3	4	5
In my organization, people understand the overall environment and use information to adjust work practices.	1	2	3	4	5
In my organization, people are helped to see the effect of their work on the entire organization.	1	2	3	4	5
Strategic leadership					
Leaders in my organization provide the necessary mentoring and coaching to their subordinates.	1	2	3	4	5
Leaders in my organization provide their subordinates with opportunities to learn.	1	2	3	4	5
Leaders in my organization try to use learning as a tool to achieve organizational objectives.	1	2	3	4	5

APPENDIX III

CONSENT FORM
FOR PARTICIPATION IN SURVEY RESEARCH

GENDER AND THE LEARNING ORGANIZATION

Dear Participant,

You are invited to participate in a research study being conducted by AUB –*Olayan Business School, MHRM*. The purpose of the research is to explore the relationship between gender and aspects of learning within private sector institutions.

The survey has been designed to gather information from approximately *200* individuals, meeting the inclusion criteria as follows: current employees from different companies in Lebanon and aged 18 and above.

The data collected from the survey will be analyzed using basic descriptive statistics, correlations and analysis of variance and multivariate analysis.

Your participation in this study is completely voluntary. No compensation will be provided for participation. You may skip any questions you don't wish to answer. There are no risks involved in participating in this research, since your participation and your answers will be confidential and anonymous, and data from this survey will be reported only in aggregated form. No one other than the researchers will know your answers.

If you agree to participate in this project, please answer the questions on the survey as best you can. It should take approximately *15 minutes* to complete. Please return the questionnaire as soon as possible.

Kindly note that your refusal to participate or to withdraw from the study will not involve any penalties or less of benefits and neither will affect your relationship with AUB. Besides you may discontinue participation at any time at the same above conditions.

If you have questions at any time about the study or the procedures, you may contact my supervisor **Dr. Charlotte Karam**,(Assistant Professor, American University of Beirut, Suliman S. Olayan School of Business) via phone: 01/350000 ext: 3764) or via e-mail: *ck16@aub.edu.lb* or contact me **Miss. Remy Taher** (MHRM Student at American University of Beirut) via phone: 71/107020 or 01/745660 ext: 119) or via email: *rft05@mail.aub.edu*.

For concerns and complaints about research, question about subjects rights, please contact IRB (Institutional Review Board, American University of Beirut, PO BOX: 11-0236 F15, Riad El Solh, Beirut 1107 2020, Lebanon) **via phone:** 00961 1 374374, ext: 5445, **Fax:** 00961 1 374374, ext: 5444) **or via Email:** irb@aub.edu.lb

 If you agree to participate with this survey, please start answering.

Thanks for your support.

Descriptive statistics (Demographic Factors)

Definition of some statistical indicators:

- Mean: Is the average of a set of numbers.

- Mode: Is the value of that occurs the most often.

- Std. Deviation: Is a measure of how spread out the data is.

- CV (Coefficient of variation): Is an indicator to measure the dispersion of the values of each variable around the mean, if this value was close to 0.00% and less than 50.00% we consider the dispersion low and if it was greater than 50.00% and close to 100.00% we consider it high. (CV= Std. deviation/Mean).

Figure A.1.

Gender (2 participants didn't answer this question)
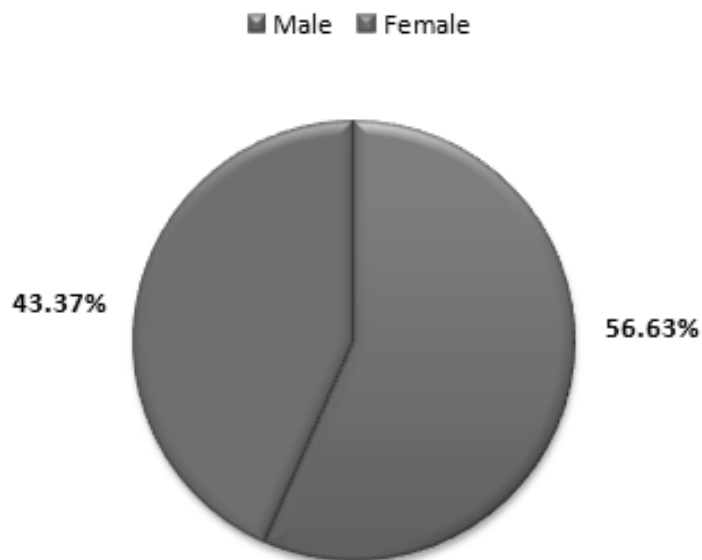
56.63% of participants are males while 43.37% are females.

Figure A.2.

Education
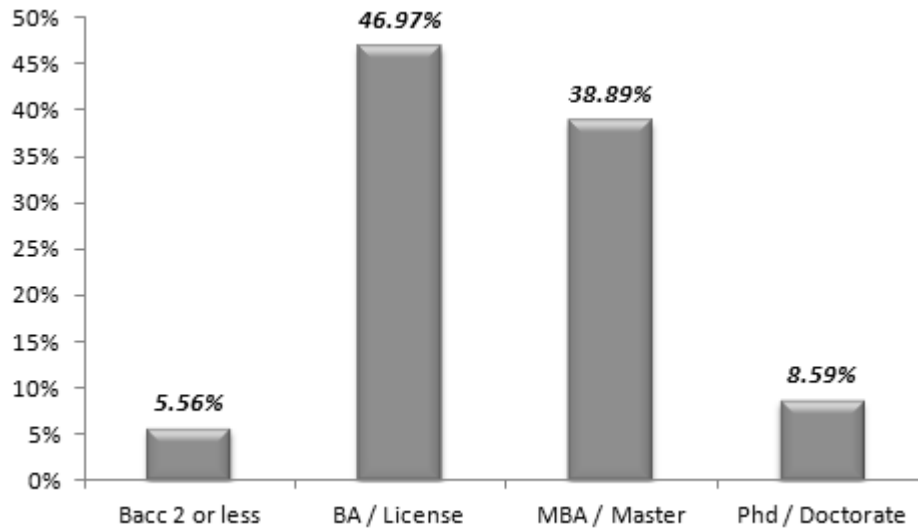
46.97% of participants have BA degree, 38.89% MBA or master degree, 8.59%

PhD or doctorate and only 5.56% don't have university degrees.

Figure A.3.

Job level (3 participants didn't answer this question)
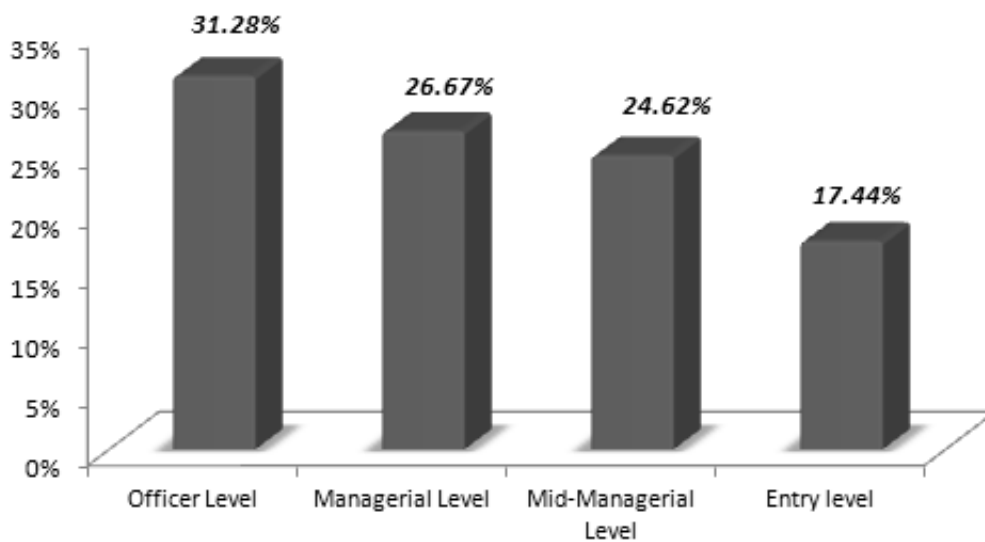
31.28% of participants are in officer level, 26.67% managerial level, 24.62%

mid-managerial level and 17.44% entry level.

Figure A.4.

Annual revenue (75 participants didn't answer this question)
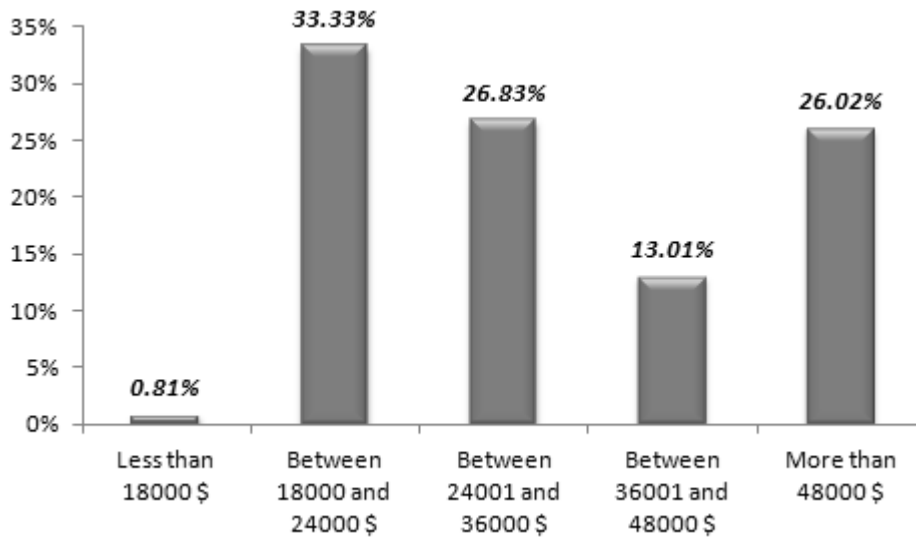
33.33% of respondents have annual revenue between 18000 and 24000$,

26.83% between 24001 and 36000$, 26.02% more than 48000$, 13.01% between

36001$ and 48000$ and only 0.81% of respondents have annual revenue less than

18000$.

Table A.1

Experience (15 participants didn't answer this question)

Mean	**7.73**
Mode	1.00
Std. Deviation	6.17
Minimum	1.00
Maximum	30.00
CV	79.82%

The respondents have around 8 years of experience.

Table A.2

Tenure *(28 participants didn't answer this question)*

Mean	**5.19**
Mode	1.00
Std. Deviation	5.24
Minimum	1.00
Maximum	29.00
CV	100.97%

In average the respondents are working for the same employer since 5 years.

Figure A.5.

Marital status
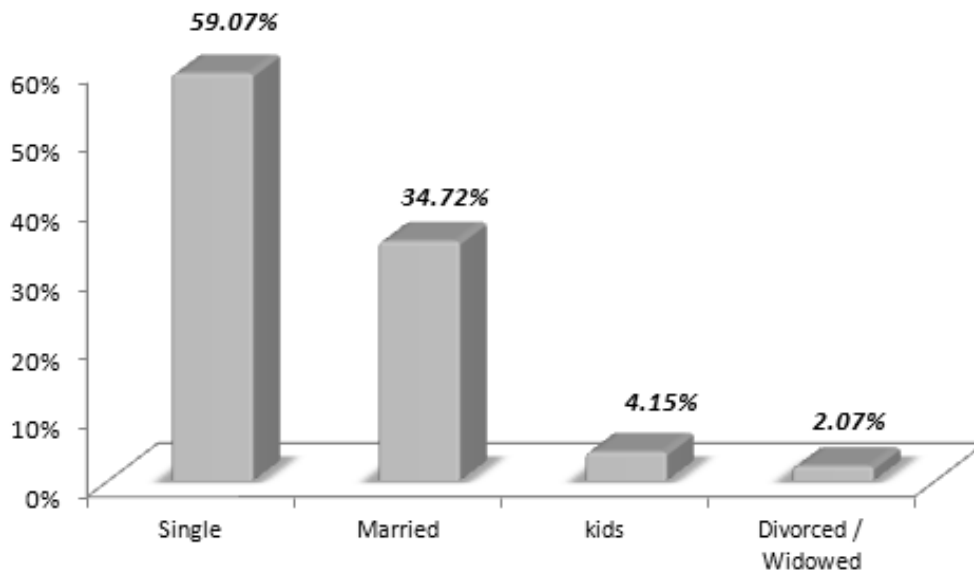
59.07% of participants are single, 34.72% are married, 4.15% of respondents still kids and only 2.07% are divorced or widowed.

Descriptive statistics by item

To which extent do you agree with each of the proposed statements, where

1= Strongly disagree…….. 5= Strongly agree

- **Continuous learning**

	Mean	**Mode**	**Std. Deviation**	**CV**
The system in my organization encourages its people to help each other learn.	3.35	4.00	1.18	35.28%
The system in my organization provides all the time needed to support learning.	3.35	4.00	1.13	33.55%
People in my organization get rewarded for learning.	3.19	4.00	1.23	38.36%

- **Inquiry and dialogue**

	Mean	**Mode**	**Std. Deviation**	**CV**
People in my organization are encouraged and are likely to provide open feedback.	3.24	4.00	1.11	34.33%
People in my organization are encouraged and are likely to ask what others think.	3.21	4.00	1.16	35.95%
People in my organization spend enough time in building trust.	3.14	3.00	1.16	37.08%

- **Team learning**

	Mean	**Mode**	**Std. Deviation**	**CV**
The work in my organization is designed to use teams to access different modes of thinking.	3.26	4.00	1.09	33.35%
In my organization, collaboration is valued and rewarded.	3.18	3.00	1.13	35.64%
In my organization, teams are not expected to work together but to learn by working together.	3.24	4.00	1.08	33.44%

- **Embedded system**

	Mean	Mode	Std. Deviation	CV
My organization has all necessary technology to allow and promote information sharing.	3.49	4.00	1.11	31.90%
In my organization, lessons learned from training are made available for all members.	3.36	4.00	1.22	36.47%
In my organization, all training activities are measured and assessed.	3.23	4.00	1.13	34.91%

- **Empowerment**

	Mean	Mode	Std. Deviation	CV
In my organization, members are recognized for taking initiative.	3.28	4.00	1.12	34.23%
In my organization, people are involved in setting and implementing a shared vision.	3.23	3.00	1.11	34.29%
In my organization, responsibility is distributed so that people are motivated to learn what they are held accountable to do.	3.33	4.00	1.22	36.82%

- **System connection**

	Mean	Mode	Std. Deviation	CV
My organization is well connected to its internal and external environment, thus facilitating information flow and sharing.	3.53	4.00	1.15	32.72%
In my organization, people understand the overall environment and use information to adjust work practices.	3.30	4.00	1.02	30.81%
In my organization, people are helped to see the effect of their work on the entire organization.	3.31	4.00	1.14	34.56%

- **Strategic leadership**

	Mean	Mode	Std. Deviation	CV
Leaders in my organization provide the necessary mentoring and coaching to their subordinates.	3.38	4.00	1.16	34.28%
Leaders in my organization provide their subordinates with opportunities to learn.	3.52	4.00	1.13	32.15%
Leaders in my organization try to use learning as a tool to achieve organizational objectives.	3.44	4.00	1.21	35.06%

Inferential statistics by item

1. Gender

- **Continuous learning**

	Male	Female	Sig
The system in my organization encourages its people to help each other learn.	3.37	3.33	0.828
The system in my organization provides all the time needed to support learning.	3.31	3.44	0.416
People in my organization get rewarded for learning.	3.27	3.09	0.310

- **Inquiry and dialogue**

	Male	Female	Sig
People in my organization are encouraged and are likely to provide open feedback.	3.24	3.23	0.924
People in my organization are encouraged and are likely to ask what others think.	3.31	3.08	0.173
People in my organization spend enough time in building trust.	3.23	3.00	0.174

- **Team learning**

	Male	Female	Sig
The work in my organization is designed to use teams to access different modes of thinking.	3.39	3.09	0.060
In my organization, collaboration is valued and rewarded.	3.28	3.05	0.186
In my organization, teams are not expected to work together but to learn by working together.	3.19	3.28	0.561

- **Embedded system**

	Male	Female	Sig
My organization has all necessary technology to allow and promote information sharing.	3.63	3.30	0.051
In my organization, lessons learned from training are made available for all members.	3.38	3.33	0.769
In my organization, all training activities are measured and assessed.	3.29	3.13	0.322

- **Empowerment**

	Male	Female	Sig
In my organization, members are recognized for taking initiative.	3.40	3.15	0.127
In my organization, people are involved in setting and implementing a shared vision.	3.33	3.10	0.166
In my organization, responsibility is distributed so that people are motivated to learn what they are held accountable to do.	3.42	3.20	0.244

- **System connection**

	Male	Female	Sig
My organization is well connected to its internal and external environment, thus facilitating information flow and sharing.	3.62	3.40	0.212
In my organization, people understand the overall environment and use information to adjust work practices.	3.34	3.25	0.527
In my organization, people are helped to see the effect of their work on the entire organization.	3.45	3.13	0.054

- **Strategic leadership**

	Male	Female	Sig
Leaders in my organization provide the necessary mentoring and coaching to their subordinates.	3.43	3.31	0.467
Leaders in my organization provide their subordinates with opportunities to learn.	3.51	3.52	0.980
Leaders in my organization try to use learning as a tool to achieve organizational objectives.	3.40	3.51	0.521

2. Education

- **Continuous learning**

	Bacc 2 or less	BA / License	MBA / Master	PhD / Doctorate	Sig
The system in my organization encourages its people to help each other learn.	3.45	3.33	3.36	3.35	0.989
The system in my organization provides all the time needed to support learning.	3.36	3.38	3.25	3.65	0.600

	Bacc 2 or less	BA / License	MBA / Master	PhD / Doctorate	Sig
People in my organization get rewarded for learning.	3.10	3.36	3.01	3.18	0.363

- **Inquiry and dialogue**

	Bacc 2 or less	BA / License	MBA / Master	PhD / Doctorate	Sig
People in my organization are encouraged and are likely to provide open feedback.	3.00	3.18	3.37	3.13	0.599
People in my organization are encouraged and are likely to ask what others think.	3.27	3.20	3.27	3.00	0.859
People in my organization spend enough time in building trust.	3.09	3.14	3.17	3.00	0.960

- **Team learning**

	Bacc 2 or less	BA / License	MBA / Master	PhD / Doctorate	Sig
The work in my organization is designed to use teams to access different modes of thinking.	3.45	3.31	3.19	3.18	0.816
In my organization, collaboration is valued and rewarded.	3.00	3.25	3.07	3.41	0.584
In my organization, teams are not expected to work together but to learn by working together.	3.55	3.28	2.99	3.82	0.020

- **Embedded system**

	Bacc 2 or less	BA / License	MBA / Master	PhD / Doctorate	Sig
My organization has all necessary technology to allow and promote information sharing.	3.91	3.42	3.49	3.59	0.571
In my organization, lessons learned from training are made available for all members.	3.82	3.36	3.38	3.00	0.391
In my organization, all training activities are measured and assessed.	3.36	3.30	3.12	3.24	0.759

- **Empowerment**

	Bacc 2 or less	BA / License	MBA / Master	PhD / Doctorate	Sig
In my organization, members are recognized for taking initiative.	3.18	3.23	3.32	3.47	0.849
In my organization, people are involved in setting and implementing a shared vision.	3.36	3.33	3.13	3.12	0.639
In my organization, responsibility is distributed so that people are motivated to learn what they are held accountable to do.	3.45	3.33	3.33	3.18	0.945

- **System connection**

	Bacc 2 or less	BA / License	MBA / Master	PhD / Doctorate	Sig
My organization is well connected to its internal and external environment, thus facilitating information flow and sharing.	3.91	3.47	3.50	3.71	0.597
In my organization, people understand the overall environment and use information to adjust work practices.	3.18	3.27	3.33	3.47	0.857
In my organization, people are helped to see the effect of their work on the entire organization.	3.45	3.36	3.24	3.18	0.842

- **Strategic leadership**

	Bacc 2 or less	BA / License	MBA / Master	PhD / Doctorate	Sig
Leaders in my organization provide the necessary mentoring and coaching to their subordinates.	3.00	3.46	3.32	3.47	0.594
Leaders in my organization provide their subordinates with opportunities to learn.	3.55	3.53	3.44	3.71	0.852
Leaders in my organization try to use learning as a tool to achieve organizational objectives.	3.64	3.49	3.34	3.50	0.814

3. Job level

- **Continuous learning**

	Entry level	Officer Level	Mid-Managerial Level	Managerial Level	Sig
The system in my organization encourages its people to help each other learn.	3.38	3.09	3.45	3.52	0.235
The system in my organization provides all the time needed to support learning.	3.27	3.16	3.51	3.41	0.396
People in my organization get rewarded for learning.	2.94	3.16	3.13	3.41	0.364

- **Inquiry and dialogue**

	Entry level	Officer Level	Mid-Managerial Level	Managerial Level	Sig
People in my organization are encouraged and are likely to provide open feedback.	3.21	3.21	3.30	3.24	0.980
People in my organization are encouraged and are likely to ask what others think.	3.24	3.22	3.18	3.22	0.997
People in my organization spend enough time in building trust.	2.91	3.22	3.02	3.24	0.498

- **Team learning**

	Entry level	Officer Level	Mid-Managerial Level	Managerial Level	Sig
The work in my organization is designed to use teams to access different modes of thinking.	2.97	3.30	3.30	3.38	0.370
In my organization, collaboration is valued and rewarded.	2.84	3.16	3.52	3.18	0.083
In my organization, teams are not expected to work together but to learn by working together.	3.13	3.40	3.16	3.16	0.534

- **Embedded system**

	Entry level	Officer Level	Mid-Managerial Level	Managerial Level	Sig
My organization has all necessary technology to allow and promote information sharing.	3.33	3.40	3.50	3.67	0.519
In my organization, lessons learned from training are made available for all members.	3.45	3.30	3.32	3.32	0.945
In my organization, all training activities are measured and assessed.	3.22	3.23	3.18	3.24	0.995

- **Empowerment**

	Entry level	Officer Level	Mid-Managerial Level	Managerial Level	Sig
In my organization, members are recognized for taking initiative.	3.03	3.20	3.56	3.29	0.212
In my organization, people are involved in setting and implementing a shared vision.	3.06	3.51	3.13	3.14	0.181
In my organization, responsibility is distributed so that people are motivated to learn what they are held accountable to do.	3.34	3.38	3.18	3.37	0.844

- **System connection**

	Entry level	Officer Level	Mid-Managerial Level	Managerial Level	Sig
My organization is well connected to its internal and external environment, thus facilitating information flow and sharing.	3.64	3.43	3.52	3.53	0.879
In my organization, people understand the overall environment and use information to adjust work practices.	3.24	3.31	3.30	3.32	0.988
In my organization, people are helped to see the effect of their work on the entire organization.	3.06	3.50	3.14	3.41	0.209

- **Strategic leadership**

	Entry level	Officer Level	Mid-Managerial Level	Managerial Level	Sig
Leaders in my organization provide the necessary mentoring and coaching to their subordinates.	3.52	3.16	3.40	3.53	0.328
Leaders in my organization provide their subordinates with opportunities to learn.	3.76	3.40	3.40	3.60	0.413
Leaders in my organization try to use learning as a tool to achieve organizational objectives.	3.61	3.36	3.35	3.48	0.765

4. Annual revenue

For statistical reason and since we have only one respondent with annual

revenue less than 18.000$ per year, the comparison didn't include it.

- **Continuous learning**

	Between 18000 and 24000 $	Between 24001 and 36000 $	Between 36001 and 48000 $	More than 48000 $	Sig
The system in my organization encourages its people to help each other learn.	3.08	3.41	3.69	3.69	0.149
The system in my organization provides all the time needed to support learning.	3.13	3.45	3.44	3.68	0.255
People in my organization get rewarded for learning.	3.18	3.13	3.56	3.45	0.572

- **Inquiry and dialogue**

	Between 18000 and 24000 $	Between 24001 and 36000 $	Between 36001 and 48000 $	More than 48000 $	Sig
People in my organization are encouraged and are likely to provide open feedback.	2.89	2.97	3.33	3.72	0.013
People in my organization are encouraged and are likely to ask what others think.	2.89	3.10	3.13	3.48	0.244
People in my organization spend enough time in building trust.	3.11	2.97	3.40	3.29	0.614

- **Team learning**

	Between 18000 and 24000 $	Between 24001 and 36000 $	Between 36001 and 48000 $	More than 48000 $	Sig
The work in my organization is designed to use teams to access different modes of thinking.	3.26	3.29	3.50	3.52	0.722
In my organization, collaboration is valued and rewarded.	3.34	3.16	3.06	3.53	0.469
In my organization, teams are not expected to work together but to learn by working together.	3.24	3.10	3.00	3.33	0.735

- **Embedded system**

	Between 18000 and 24000 $	Between 24001 and 36000 $	Between 36001 and 48000 $	More than 48000 $	Sig
My organization has all necessary technology to allow and promote information sharing.	3.38	3.32	3.81	3.88	0.140
In my organization, lessons learned from training are made available for all members.	3.41	3.16	3.38	3.35	0.873
In my organization, all training activities are measured and assessed.	3.39	2.90	3.13	3.35	0.310

- **Empowerment**

	Between 18000 and 24000 \$	Between 24001 and 36000 \$	Between 36001 and 48000 \$	More than 48000 \$	Sig
In my organization, members are recognized for taking initiative.	3.08	3.28	3.38	3.63	0.318
In my organization, people are involved in setting and implementing a shared vision.	3.06	3.16	3.25	3.35	0.784
In my organization, responsibility is distributed so that people are motivated to learn what they are held accountable to do.	3.19	3.19	3.27	3.52	0.713

- **System connection**

	Between 18000 and 24000 \$	Between 24001 and 36000 \$	Between 36001 and 48000 \$	More than 48000 \$	Sig
My organization is well connected to its internal and external environment, thus facilitating information flow and sharing.	3.45	3.43	3.87	3.74	0.492
In my organization, people understand the overall environment and use information to adjust work practices.	3.47	3.13	3.40	3.50	0.486
In my organization, people are helped to see the effect of their work on the entire organization.	3.42	3.20	3.27	3.48	0.757

- **Strategic leadership**

	Between 18000 and 24000 \$	Between 24001 and 36000 \$	Between 36001 and 48000 \$	More than 48000 \$	Sig
Leaders in my organization provide the necessary mentoring and coaching to their subordinates.	3.34	3.25	3.53	3.75	0.338
Leaders in my organization provide their subordinates with opportunities to learn.	3.45	3.31	3.60	3.77	0.428
Leaders in my organization try to use learning as a tool to achieve	3.38	3.42	3.57	3.62	0.849

organizational objectives.						

5. Experience (Correlation)

- **Continuous learning**

	Sig	Pearson Correlation	Result
The system in my organization encourages its people to help each other learn.	0.091	0.127	No correlation
The system in my organization provides all the time needed to support learning.	0.201	0.097	No correlation
People in my organization get rewarded for learning.	0.298	0.079	No correlation

- **Inquiry and dialogue**

	Sig	Pearson Correlation	Result
People in my organization are encouraged and are likely to provide open feedback.	0.785	-0.021	No correlation
People in my organization are encouraged and are likely to ask what others think.	0.461	-0.056	No correlation
People in my organization spend enough time in building trust.	0.570	0.043	No correlation

- **Team learning**

	Sig	Pearson Correlation	Result
The work in my organization is designed to use teams to access different modes of thinking.	0.566	0.044	No correlation
In my organization, collaboration is valued and rewarded.	0.834	-0.016	No correlation
In my organization, teams are not expected to work together but to learn by working together.	0.637	-0.036	No correlation

- **Embedded system**

	Sig	Pearson Correlation	Result
My organization has all necessary technology to allow and promote information sharing.	0.964	0.004	No correlation
In my organization, lessons learned from training	0.622	-0.038	No correlation

are made available for all members.			
In my organization, all training activities are measured and assessed.	0.408	-0.064	No correlation

- **Empowerment**

	Sig	Pearson Correlation	Result
In my organization, members are recognized for taking initiative.	0.873	0.012	No correlation
In my organization, people are involved in setting and implementing a shared vision.	0.464	-0.057	No correlation
In my organization, responsibility is distributed so that people are motivated to learn what they are held accountable to do.	0.958	-0.004	No correlation

- **System connection**

	Sig	Pearson Correlation	Result
My organization is well connected to its internal and external environment, thus facilitating information flow and sharing.	0.626	-0.037	No correlation
In my organization, people understand the overall environment and use information to adjust work practices.	0.813	-0.018	No correlation
In my organization, people are helped to see the effect of their work on the entire organization.	0.966	0.003	No correlation

- **Strategic leadership**

	Sig	Pearson Correlation	Result
Leaders in my organization provide the necessary mentoring and coaching to their subordinates.	0.480	0.054	No correlation
Leaders in my organization provide their subordinates with opportunities to learn.	0.768	-0.022	No correlation
Leaders in my organization try to use learning as a tool to achieve organizational objectives.	0.907	0.009	No correlation

6. Tenure (Correlation)

- **Continuous learning**

	Sig	Pearson Correlation	Result
The system in my organization encourages its people to help each other learn.	0.113	0.122	No correlation
The system in my organization provides all the time needed to support learning.	0.026	0.171	No correlation
People in my organization get rewarded for learning.	0.130	0.118	No correlation

- **Inquiry and dialogue**

	Sig	Pearson Correlation	Result
People in my organization are encouraged and are likely to provide open feedback.	0.587	0.042	No correlation
People in my organization are encouraged and are likely to ask what others think.	0.653	0.035	No correlation
People in my organization spend enough time in building trust.	0.063	0.145	No correlation

- **Team learning**

	Sig	Pearson Correlation	Result
The work in my organization is designed to use teams to access different modes of thinking.	0.829	0.017	No correlation
In my organization, collaboration is valued and rewarded.	0.941	-0.006	No correlation
In my organization, teams are not expected to work together but to learn by working together.	0.589	0.042	No correlation

- **Embedded system**

	Sig	Pearson Correlation	Result
My organization has all necessary technology to allow and promote information sharing.	0.940	0.006	No correlation

	Sig	Pearson Correlation	Result
In my organization, lessons learned from training are made available for all members.	0.642	0.036	No correlation
In my organization, all training activities are measured and assessed.	0.829	0.017	No correlation

- **Empowerment**

	Sig	Pearson Correlation	Result
In my organization, members are recognized for taking initiative.	0.356	0.072	No correlation
In my organization, people are involved in setting and implementing a shared vision.	0.703	0.030	No correlation
In my organization, responsibility is distributed so that people are motivated to learn what they are held accountable to do.	0.383	0.069	No correlation

- **System connection**

	Sig	Pearson Correlation	Result
My organization is well connected to its internal and external environment, thus facilitating information flow and sharing.	0.687	0.032	No correlation
In my organization, people understand the overall environment and use information to adjust work practices.	0.301	0.081	No correlation
In my organization, people are helped to see the effect of their work on the entire organization.	0.465	0.057	No correlation

- **Strategic leadership**

	Sig	Pearson Correlation	Result
Leaders in my organization provide the necessary mentoring and coaching to their subordinates.	0.672	0.033	No correlation
Leaders in my organization provide their subordinates with opportunities to learn.	0.983	0.002	No correlation
Leaders in my organization try to use learning as a tool to achieve organizational objectives.	0.747	0.026	No correlation

7. Marital status

For statistical reason the respondents who answered Divorced/Widowed or

Kids were considered as others (frequencies were very low)

- **Continuous learning**

	Single	Married	Others	Sig
The system in my organization encourages its people to help each other learn.	3.39	3.33	3.08	0.687
The system in my organization provides all the time needed to support learning.	3.42	3.29	3.00	0.418
People in my organization get rewarded for learning.	3.13	3.27	3.42	0.608

- **Inquiry and dialogue**

	Single	Married	Others	Sig
People in my organization are encouraged and are likely to provide open feedback.	3.32	3.08	3.33	0.373
People in my organization are encouraged and are likely to ask what others think.	3.27	3.20	2.67	0.230
People in my organization spend enough time in building trust.	3.22	3.02	2.92	0.422

- **Team learning**

	Single	Married	Others	Sig
The work in my organization is designed to use teams to access different modes of thinking.	3.24	3.25	3.50	0.736
In my organization, collaboration is valued and rewarded.	3.27	3.14	2.67	0.196
In my organization, teams are not expected to work together but to learn by working together.	3.24	3.17	3.42	0.744

- **Embedded system**

	Single	Married	Others	Sig
My organization has all necessary technology to allow and promote information sharing.	3.54	3.38	3.83	0.373
In my organization, lessons learned from training are made available for all members.	3.40	3.29	3.17	0.734
In my organization, all training activities are measured and assessed.	3.27	3.19	3.08	0.807

- **Empowerment**

	Single	Married	Others	Sig
In my organization, members are recognized for taking initiative.	3.41	3.18	2.75	0.100
In my organization, people are involved in setting and implementing a shared vision.	3.32	3.18	2.67	0.142
In my organization, responsibility is distributed so that people are motivated to learn what they are held accountable to do.	3.46	3.23	2.64	0.078

- **System connection**

	Single	Married	Others	Sig
My organization is well connected to its internal and external environment, thus facilitating information flow and sharing.	3.69	3.29	3.36	0.081
In my organization, people understand the overall environment and use information to adjust work practices.	3.41	3.17	3.09	0.242
In my organization, people are helped to see the effect of their work on the entire organization.	3.36	3.35	2.45	0.039

- **Strategic leadership**

	Single	Married	Others	Sig
Leaders in my organization provide the necessary mentoring and coaching to their subordinates.	3.41	3.40	2.91	0.388
Leaders in my organization provide their subordinates with opportunities to learn.	3.58	3.47	3.18	0.490
Leaders in my organization try to use learning as a tool to achieve organizational objectives.	3.47	3.42	3.11	0.691

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