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The American University in Cairo

School of Global Affairs and Public Policy

**PARTICIPATIVE DECISION MAKING AND EMPLOYEES JOB
SATISFACTION:
A COMPARISON BETWEEN PUBLIC AND PRIVATE
PHARMACEUTICAL COMPANIES IN EGYPT**

A Thesis Submitted to the

Public Policy and Administration Department

**in partial fulfillment of the requirements for the degree of
Master of Public Administration**

By

AMAL SAADELDEEN ELSAYED ALI AZAB

Fall 2016

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To my mother, you were and will always remain my source of inspiration and strength. I know I am blessed to have you. May Allah bless your soul.

To the rest of my family, for their love and understanding.

To everyone who participated voluntarily in this study, contributed their ideas, and those who really helped open a way through which data collection for this study was feasible.

To my supervisor, my readers, and to all my professors at the AUC thank you for the effort and dedication.

The American University in Cairo
School of Global Affairs and Public Policy
Department of Public Policy and Administration

PARTICIPATIVE DECISION MAKING AND EMPLOYEES JOB SATISFACTION:
A COMPARISON BETWEEN PUBLIC AND PRIVATE PHARMACEUTICAL
COMPANIES IN EGYPT

Amal Saadeldeen Elsayed Ali Azab

Supervised by Professor Shahjahan Bhuiyan

ABSTRACT

The study investigated how does participative decision making affect employees' job satisfaction in a specific work setting (Public and private pharmaceutical companies in Egypt). A public pharmaceutical company was chosen as an example for public business sector companies in Egypt, and a comparison was made between the forms of management system applied in the public versus the private sampled companies. The study used in-depth semi- structured interviews with a total number of 32 employees and managers interviewed from the two companies. Results of the study highlighted a strong relation proving that applying participative decision making in the company increases employees' job satisfaction. In addition, the study assessed four employee-based factors affecting participative decision making and concluded that employee's efficiency has a positive effect on incorporating the employee in the decision making process, then comes the second factor which is the years of employee's experience in the same field. On the other hand the study failed to find a strong correlation between the other two factors - the educational level and the managerial level- and participative decision making, suggesting the need for further study.

The comparison held in the study included the pathways each company gives for its employees to communicate with the middle and top management levels. It also included four institutional-based factors affecting employees' satisfaction and participation in decision making; the incentives system, promotion system, concept of hard work in the organizational culture, and disciplinary system and accountability distribution. And the study concluded that the management system applied in the private company encourages employees more to participate in the decision-making process and their incentives system, promotion system, and disciplinary systems were found more satisfying to employees compared to the systems applied in the public company. The study came up with recommendations directed to the management of the public company in order to increase employees' satisfaction and thereby increase company competitiveness against the fast growing private sector in Egypt.

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Chapter 1: Introduction

1.1 Job satisfaction and PDM

Research in job satisfaction has augmented in recent years, as more empirical evidence accumulate proving that findings from such research can significantly benefit organizations when designing their management strategies. Examples from such benefits include: improved employee performance (Wright and Cropanzano, 2004), also lower staff turnover and absenteeism which in turn result in saving recruitment and training costs (Mirvis and Lawler, 1977). Generally, organizations are understood to be economic institutions. Whether explicitly or implicitly mentioned, this perspective has shaped the relationship between employers and their workforce (Ashforth & Humphrey, 1995). For example, many organizations emphasize the exchange of monetary payment for performing concrete tasks (Barley & Kunda, 1992).

At the same time, more evidence is also gathered regarding the role of participative decision making (PDM) in enhancing job satisfaction. For example, Cawley, Keeping, and Levy (1998) examined employees' participation in performance appraisal, and their findings showed that when employees had a voice the more they were satisfied, even when participation could not affect their rating. Simply being able to speak one's mind made the employees more favorable towards the performance appraisal system perceiving it as more fair and they were motivated to do better (Corpanzana et al, 2007). Employees who enjoy decision-making participation feel secure in their jobs (Irawanto, 2015).

The current study aims to investigate how PDM can affect job satisfaction in a specific work setting (public and private pharmaceutical companies in Egypt). When reviewing literature of studies made about the effect of PDM on employees' job satisfaction; the study found that results of numerous studies such as Probst (2005), Lange (2009), Van der Westhuizen et al. (2012) and Appelbaum et al. (2013) explicitly found out that PDM

increases job satisfaction, and this finding can be generalized in many fields. Other studies such as Irawanto (2015) explained how PDM benefits organizational goals.

Nevertheless, there is a research gap in explaining how PDM has this positive effect on job satisfaction. Limited number of studies such as Pacheco and Weber (2016) identified potential mechanisms through which PDM positively influence job satisfaction as explained in the literature review chapter. Further studies are needed since the previous positive effect of PDM on job satisfaction is also affected by many mediating factors such as cultural, personal, and work related factors, thus it is important in variant work settings to identify the proper forms of PDM that can improve job satisfaction and benefit work productivity. This is done in this study by investigating PDM practice and how it affects job satisfaction in specific work settings which are the two sample pharmaceutical companies.

1.2 Background about the study sample:

Growth of pharmaceutical industry in Egypt and competing upon human resources

The Pharmaceutical companies (with factories in Egypt) are classified according to their ownership type into three categories:

A) Public Business Sector Companies:

Public sector production is represented by the state-owned Holding Company for pharmaceuticals (Holdipharma) previously known as Drug Holding Company (D.H.C) together with its eight affiliated manufacturing companies. They account for around one-tenth of sales by value and nearly two-tenths by volume (GAFI, 2012). The chairman of Holdipharma refers to the concerned governmental authority which is currently the Ministry of Public Business Sector. Law No. 203 issued in 1991 governs the operation of the Holding company for pharmaceuticals and its affiliates, and states that “In the field of its activity and through its affiliates the company holds to participate in the development of the national economy in the framework of the general policy of the State” (Business sector information center official website, 2016). Experience shows that public sector

pharmaceutical companies continue to provide medicines less than the average prices in the Egyptian market compared to their comparable private sector companies.

B) Locally owned Egyptian companies (Private Sector): Currently, this is the largest group in terms of the number of companies. They were 42 companies in 2008 (Shinnawy, 2009) and the study identified a continuous increase in their number compared to the other two groups. They produce generic products and they play a key role in the domestic market. Among them is the Egyptian International Pharmaceutical Industries Company (EIPICO) which was ranked as the leading manufacturer in the domestic market and the largest Arab pharmaceutical company overall. A top company on the Cairo and Alexandria Stock Exchange (CASE), EIPICO is also one of Egypt's 100 largest exporters (GAFI, 2012).

C) Large multinationals, they were seven companies in 2008 (Shinnawy, 2009) including GlaxoSmithKline (GSK), Sanofi-Aventis and Novartis among the top manufacturers of pharmaceuticals in the domestic market. Other leading multinational companies joined the field including Pfizer, Bristol-Myers Squibb, Servier, Eli Lilly, AstraZeneca and Otsuka (GAFI, 2012).

A total of 58 pharmaceutical manufacturing companies were present on the Egyptian market in 2009, including nine companies which fall under public business sector ownership, seven subsidiaries of research-based (multinational) companies, and 42 private local owned companies. This is to be noted here that there are also research-based companies with no manufacturing presence in Egypt but they supply the market through a large number of representative scientific offices (Shinnawy, 2009).

The following Figure 1 describes classification of pharmaceutical manufacturing companies in Egypt according to their ownership type.

Figure 1: classification of pharmaceutical manufacturing companies in Egypt according to their ownership type.

Public Sector (Drug Holding Com.)	Foreign Companies	Private Sector	
1 ADCO 2 ALEX 3 CID 4 KAHIRA 5 MEMPHIS 6 MISR 7 NASR 8 NILE 9 SEPCO	1 AMGEN 2 AVENTIS 3 BMS 4 GLAXO 5 NOVARTIS 6 PFIZER 7 SERVIER	1 Acapi 2 Adwia 3 Hikma 4 Amoun 5 Amriya 6 Arabcaps 7 Arabcomed 8 Army (logistic) 9 Atos 10 Bio-Original 11 Borg 12 Chemipharm 13 Delta Pharm 14 EIPICO 15 Epci 16 European Egyptian 17 Eva Pharm 18 Global Napi 19 Haidelyna 20 Hi Pharm 21 Jedco	22 Marcyrl 23 Mepaco 24 Minapharm 25 Multiapex 26 MUP 27 New Life 28 October Pharm 29 Opi Pharm 30 Pharco 31 Pharopharm 32 Philopharm 33 Rameda 34 Rivapharm 35 SEDICO 36 Sigma 37 Simco 38 T3A 39 Technopharm 40 Unipharm 41 Vetopharm 42 Vitapharm

(Source: Shinrawy, 2009)

In 2011, the Egyptian Ministry of Health published a report about the pharmaceutical country profile in cooperation with the World Health Organization (WHO). The report mentioned there were 119 licensed pharmaceutical manufacturers in Egypt (Egypt pharmaceutical country profile in coordination with WHO, 2011).

This increase in the number of pharmaceutical manufacturing companies in Egypt reveals increasing competitiveness in the labor market upon talented and skilled human resources. And since the number of public companies diminished to eight companies while the majority of increasing factories lie in the categories of private and multinational branches, this puts extra burden on the public companies to stay competitive.

Concerning the public business sector in Egypt, it is formed of eight holding companies with 125 affiliated companies working in various fields namely tourism, medicine, chemical industries, land and maritime transport, food industries, construction, and metallurgical industries, cotton, spinning and weaving, and insurance. They are state-owned companies representing one of the sources of national income with surplus 1.9 billion Egyptian Pounds (EGP) in 2014/2015, yet some of the companies are facing debts such as the cotton and textile company and represented a dilemma for consecutive investment ministers since the 2011 uprising (Ministry of Investment official website, 2016).

In 2016 the Ministry of Public Business sector which was formed again aiming to reform the sector by enhancing asset utilization, administrative reform and other tools as announced on the official page of the business sector information center. And since the public companies have their objectives of creating balance in the essential goods in local market as well as contributing with their profits in national income, thus studying the administrative reform of those companies is important for their survival and improving the use of their human resources (Business sector information center, 2016).

1.3 Statement of the research problem

The increasing number of drug factories in Egypt and the variety of ownership model reveals the apparent competitiveness between the emerging private sector companies and the old established public sector ones, leading to difficulty in attracting and retaining high caliber skilled human resources in both public and private companies, thus justifying the need for the present study to identify how to increase employee participation in decision-making which in turn can increase employee job satisfaction and decrease their turnover.

And in alliance with the national policy in Egypt directed to perform administrative reform to the public business sector in Egypt (Business sector information center, 2016), the study chose a public pharmaceutical company - as sample model for public business sector companies- investigating possible ways for their administrative reform via

discussing factors that can increase employees participation in decision-making process thus avoiding concentration of power in top management only. The study compares certain institutional-based factors in the managerial system applied by the sample public company versus the private one in order to investigate their effect on PDM. While the public companies continued to apply their old established top-down hierarchies, locally-owned private companies and branches of multinational companies appeared in the market with more competitive managerial systems, together with applying different systems for incentives, discipline, and promotion leading to attracting skilled labor from the public companies-and the other private companies which applied less efficient managerial systems- and resulting in leakage of skilled human resources from them.

On a larger scale, the study can benefit any work setting public or private; since studying factors affecting PDM and job satisfaction in any work setting will help to avoid concentration of decision-making power in limited number of people and promote interaction of the majority of human resources in the management process thus enhancing employees' satisfaction in their jobs. Lack of employees satisfaction in their jobs leads to high turnover rate and loss of qualified staff which in turn decreases productivity and commitment to the organization.

1.4 Factors affecting PDM and study aim

Numerous studies such as Probst (2005), Appelbaum et al (2013), and Irawanto (2015) found empirical evidences proving that participative decision making (PDM) is positively correlated with job satisfaction, nevertheless few studies examined the mediating factors that explain how PDM leads to increasing job satisfaction, an example of that exception is Wright and Kim (2004) who assessed three mediating factors namely; job specificity, career development support, and task significance. Besides, Pacheco and Webber (2016) mentioned that [probably] no studies prior to them investigated whether individual characteristics (such as workers socio-demographics) and occupational type characteristics play a role in the way how PDM influences job satisfaction. Thus, the

current study attempts to investigate how PDM can affect job satisfaction in a specific work setting (public and private pharmaceutical companies in Egypt). This will be done by examining the effect of eight factors (four employee-related and four institutional-based) on PDM and how that affects job satisfaction.

Factors affecting PDM

Some employee-related factors were noted to have effect on PDM; for example, employees' excellence (Timming, 2015), gender, and nationality (Al Nuaimi et al., 2015).

For the purpose of this study, the following four employee-based factors were selected to investigate their effect on PDM namely; employees' years of experience, managerial level, educational level, and efficiency and skills.

These factors were chosen based on the researcher's observations during her 12 years work experience collectively in public and private pharmaceutical companies in Egypt and her observations showed that regulations in public companies makes PDM much related to being part of the managerial hierarchy in the company, and promotion was mainly based on long work experience as a primary prerequisite before discussing employees' efficiency in doing their jobs. Educational level was also a matter of consideration when taking promotion decisions.

At the same time, it has been found that factors related to work setting (such as trust in management, see Appelbaum et al. (2013), ownership type of the organization, see Al Nuaimi et al. (2015), and cultural differences, see Elele and Fields (2010)) affect the degree of PDM employees practice in their jobs.

For the purpose of this study, four institutional-based factors were chosen to assess their effect on PDM namely incentives system, disciplinary system, promotion system, and prevalence of the principle of hard work in organizational culture. These four factors were selected because they directly affect all employees in any company and their satisfaction and willingness to cooperate with their company management. And according to researcher's observations during her work experience in public and private

pharmaceutical companies, it showed that systems implemented for incentives, disciplinary system, promotion system and the prevalence of hard work principle in organizational culture were important sources for employees' satisfaction or complaint about managerial system, thus they can lead to either motivating employees to contribute their ideas with the management system or make them reluctant to do that if they are not satisfied about these factors.

In sum, Factors that will be studied to see their effect on PDM are categorized in two groups; the first are the employee-based factors which are the years of experience, managerial level (supervisory versus non-supervisory employees), educational level and employee's efficiency and skills.

The second category comprises the institutional-based factors which are the incentives system, disciplinary system, promotion system, and the prevalence of the hard work concept in the organizational culture.

The study will conduct a comparison between the management systems applied in both the sample public versus private pharmaceutical companies concerning the four institutional-based factors investigated in this study. The comparison can also reveal the differences how managerial systems deal with the issue of employee participation in decision making, and whether they give a chance for their employees to have a "voice" inside the organization.

The comparison aims to come up with recommendations for improving employees' participation in decision making and their satisfaction in their jobs which can ultimately decrease employee turnover and improve work outcomes in both types of companies., Special focus will be made on the regulations applied in the public pharmaceutical companies in Egypt and what can be recommended to increase their employees' PDM and ultimately their competitiveness in the employment market. Since they are part of the public sector, so studying their administration reform is considered vital for their continuation, augmenting their participation in national income and contributing to the public benefit.

1.5 Research questions

The first research question for this study is: Does the higher level of PDM leads to a higher level of employees' job satisfaction in the sample public and private companies?

And the second research question is : How can employee's years of experience, managerial level, educational level, and employee's efficiency & skills affect the degree of his/her participation in the decision-making process?

And the third research question is: How can the incentives system, disciplinary system, promotion system, and prevalence of the principle of hard work affect employee's participation in the decision-making process?

And finally, the fourth research question is: Which management system - the public or the private company system encourages employees to participate more in the decision making process, hence is more satisfying to them?

This thesis is divided into five chapters. This Chapter (1) is an introduction about PDM and job satisfaction and the factors affecting them, then statement of the research problem, and then the research gap is highlighted and the study aim. Four research questions and the main objective of the study are stated in this chapter. Chapter (2) is a literature review of previous studies related to the thesis research topic, showing the research gap. Chapter (3) describes the research methodology used in this study; starting with the conceptual model set for this thesis, and then explaining why qualitative analysis is used to analyze data, tools for sample selection and data collection, ethical considerations for the study, and ending with describing the respondents' profile. Chapter (4) presents the study findings and analysis of data. It describes the method used for data analysis, discusses study findings, and compares results gained from the two sampled

companies to come up with answers to the research questions. Finally, Chapter (5) explains the study conclusions, discusses research questions, and ends with policy recommendations for public pharmaceutical companies' administrative reform, and study limitations.

Chapter 2: Literature Review

2.1 PDM and Job Satisfaction

Previous studies such as Lange (2009) and Van der Westhuizen et al. (2012) highlighted the importance of giving employees more "voice" to express their opinions and participate in decision-making in their organization. Other studies such as Probst (2005) and Appelbaum et al. (2013) also asserted the positive influence of PDM upon increasing employee satisfaction in their jobs, having higher commitment to their organization, and most importantly decreasing employees' turnover rate.

In 2005, Probst suggested the importance of PDM and how it decreases the negative consequences of job insecurity. The study analyzed data from 807 employees in six companies, and analysis suggested that job insecurity was related to lower satisfaction (whether due to coworker, work, or supervisor) and higher turnover intentions. Results concluded that "employees with greater participative decision making opportunities reported fewer negative consequences of job insecurity compared with employees with fewer participative decision making opportunities" (Probst, 2005, p.320).

In agreement with those findings, a recent study made by Pacheco and Weber (2016) quantitatively analyzed data derived from the fourth wave of the European Value Survey, with a sample that covered 48 countries, and found that prior research may have underestimated the impact of PDM on job satisfaction. The authors found strong evidence of a direct positive impact of PDM on job satisfaction, the effect is amplified after they controlled for unobserved heterogeneity. In addition, the study identified three potential mechanisms through which PDM positively influence job satisfaction. The first is that the increase in perceived significance of employee's work will fulfill the self-actualization and/or self-esteem. This explanation was derived based on Maslow hierarchy of needs explaining employee's high order needs (Maslow, 1943). The second mechanism was that PDM increases understanding of the employee to his/her institution, processes, and opportunities. Finally, the third mechanism was that PDM offers greater

communication and feedback about performance, this helps to guide employee growth and development.

In addition, in 2013, Appelbaum et al. performed an empirical case study in a Quebec manufacturing company, it quantitatively analyzed and formulated the link between trust in management and PDM and then the relation between PDM and job satisfaction. The findings illustrated that insufficient participation was related with low level of employee satisfaction. Furthermore, the study also found a positive correlation between employee commitment as a dependant variable and employee satisfaction as independent variable. Finally, the study found a negative correlation between intention to quit as dependant variable with employee engagement and commitment as independent variables (Appelbaum et al, 2013).

In agreement with the findings of the previous three studies, Irawanto (2015) explained more about the benefits of PDM in realizing organizational goals of Indonesian state-owned enterprises. According to the study, enterprises in Indonesia -as most organizations there- were highly structured bureaucracies, thus participation initiated by employees remained invisible until the early 1997 as it was considered a sensitive topic. Study results showed that the more employees were involved in discussions concerning recent issues, the more they were aware of the decision-making. Findings also showed that PDM increases employee motivation, which, in turn, helps in realizing organizational goals. This can be related to the current study that aims to investigate the application of participation programs or pathways for employees to take part in decision-making (Irawanto, 2015).

2.2 Actual compared to desired levels of participation

Alutto and Belasco (1972) study examined the effects of the presence of difference between desired versus actual levels of PDM. The study differentiated between three conditions; when the actual participation was lower than the desired the case was called "decisional deprivation", when they were approximately equal the case was called "decisional equilibrium", and when the actual participation was greater than the desired

the case was called "decisional saturation" (Alutto and Belasco, 1972). For the American employees examined in that study, only the case of decisional equilibrium was related positively with organizational commitment, while the other two cases (decisional deprivation and decisional saturation) had a negative impact on organizational commitment.

In agreement with the previous findings, the study of Kahnweiler and Thompson (2000) showed that not all workers have the same desire to participate in decision-making process. The study showed that employees with college degrees showed more interest to be more involved in decision making than those with no college degrees, and similarly those aged between 25 and 48 years old wanted more PDM compared to younger or older employees.

2.3 Pathways for PDM practice

Cotton et al. (1998) categorized forms of PDM into four groups as follows: First, direct employee participation with management to make decisions related to work; second, consultative participation where managers consider employees opinions in making their decisions; third, employee partial ownership of the organization, and fourth, representative participation via a union or staff association (Elele & Fields, 2010).

On the other hand, another categorization for PDM pathways was offered by Wood et al. (2012) illustrating two important pathways to practice PDM in work settings; the first is adjusting job design to allow for greater employees responsibility and discretion, and the second pathway is the organizational involvement methods, for example, the team-working and idea capturing schemes. Both of the previous PDM channels involve giving employees a voice in organizational decisions. Thus the nature and degree of PDM across organizations can of course vary substantially (Wood et al., 2012).

In addition, Awad and Alhashemi (2012) highlighted the importance of cooperation with colleagues/managers as a pathway to practice PDM in Bahrain. Since cooperation with managers and colleagues would also involve the employee more with his/her

organization. The study investigated employees' motives for communicating with their superiors and co-workers, as well as their satisfaction and commitment to their organization. The research identified pleasure, escape, relaxation, control and inclusion as motives which explain why people communicate with each other and how do they communicate (Awad & Alhashemi, 2012).

2.4 Factors affecting PDM and job satisfaction

Many factors were assessed in previous studies such as Al Nuaimi et al. (2015), Judge and Brono (2001), Kovach (1995), and Pacheco and Webber (2016) owing to their estimated effect upon PDM in organizations; somewhere socio-demographic and others were related to the work setting. For example, in a study that examined the effect of gender and nationality (demographic factors), and school type (factor related to work setting) on teachers' PDM in Abu Dhabi's schools, findings showed that PDM of teachers differed by three factors (gender, nationality, and school type), while job satisfaction differed by the teacher's gender and nationality only, with school type having no significant effect in general upon teachers' job satisfaction (Al Nuaimi et al., 2015).

Research in social science continues to identify explanatory variables of job satisfaction. Those ranged from socio-demographics such as age, education, and marital status, and gender as highlighted by Al Nuaimi et al. (2015) to more domain specific variables such as dispositional influences e.g. personality traits as highlighted by Judge and Brono (2001), and work situational influences as mentioned by Kovach (1995) including for example job challenge and autonomy (Pacheco and Webber, 2016).

-Excellent employees: Timming (2015) study highlighted the possession (or not) of excellence as a key criterion by which the management can determine who of the employees deserve to have a 'say' in organizational decision-making. The study differentiates between employee citizens and employee subjects, the former are invited to participate actively in decision-making, while the latter are expected to simply obey managerial directions. Excellent employees are those present in the front line production and possess the insight to identify problems that would remain invisible to the

management, otherwise, thus they act as drivers of ‘upward problem-solving’ and they contribute positively to the organization. They distinguish themselves in the work place through their superior intellectual properties which is often manifest in the form of educational attainment, and they proved their high performance at work so they became trusted to advice their superiors regarding ways to solve production problems (Timming , 2015).

-Trust in management: Appelbaum et al. (2013) found a relation between the insufficient level of trust in management and the poor participation of employees in decision making process. It also correlated PDM to employees’ job satisfaction, intention to quit, and employees’ commitment. The quantitative analysis used showed that the dependant variable (PDM) and the independent variable (trust in management) are positively correlated in a high score. Thus, suggesting that trust in management is an important determinant of employees’ willingness to participate in decision making.

-Cultural differences

The importance of considering cultural differences having an effect upon the relationship between PDM and the organizational commitment of employees was illustrated in a comparative study between Nigerian and American employees working in public sector environment, where the findings showed differences in their responses. For American employees, only actual versus desired level of participation had a positive relation to organizational commitment, for Nigerians both actual levels of participation and actual versus desired were related to organizational commitment (Elele & Fields, 2010).

2.5 Special traits for public versus private sector employees

Public Service Motivation (PSM)

Many scholars dealt with the question whether using instrumental incentives such as pay is what really motivates employees to join the public service rather than private companies (Fredrickson & Hatt, 1985; Staats, 1988, and Romzek, 1990 Qtd in Naff & Crum, 1999). Several studies such as Bright (2008), Kim (2005), Taylor (2008), and Mostafa et al. (2015) all pointed out to the presence of public service motivation as a

motivating factor associated with job satisfaction in public sector. It is clear that there are other reasons that encourage people to join the public sector such as the presence of some feeling of patriotism that drives people to join the public service. In response to the reports that appeared in USA in the 1980s which highlighted issues to be the reason for the slowly emerging crisis of competence in governmental performance such as inadequate pay, and the perception that government work is not creative or challenging, the government made efforts to improve its image and to make a more effective college recruitment campaign. In addition, the inadequate pay was treated by raising pay levels especially in high cost areas. In USA, Naff and Crum (1999) conducted a study to examine the relation between PSM and employees' attitudes by examining national survey results of approximately 10,000 federal employees. Results indicated a significant relationship between PSM and employees' job satisfaction, performance, intention to remain within the government, and also their support for the government's reinvention efforts (Naff & Crum, 1999).

An example from recent literature is a study made in Egypt in 2013 using a sample of 671 professionals in the Egyptian higher education and health sectors, it proved that PSM had a positive effect upon person-organization fit, which in turn had significant positive associations with organizational citizenship behaviors (OCB) and negative relation with work-related stress and employees' intentions for job quit. Findings of the study suggested that public managers should work to achieve congruence between employees' values and organizational values in order to improve employees experience at work (Mostafa et al., 2015).

Concerning how to choose proper motivational tools for employees in each organization we find that Blaskova (2010) called for tailoring the motivational tools not only according to organizational needs but also called managers to utilize an individual approach to motivate their employees and to assess their needs and expectations in order to keep them motivated within the organizational environment. Blaskova stressed on the necessity for motivating human potential in organizations and called for harmonizing existing motivational programs with new motivational elements based on trust between

managers and their subordinates. The suggested model was thus to create a specially designed motivational program for each employee and manager (Blaskova, 2010). Although the previously described idea of tailoring motivational programs according to each employee and his/her manager might be difficult in application, but it could be of special importance in cases where an organization faces the problem of rapid turnover rate of employees with special skills so that the cost of hiring new ones and affording to lose their experience can exceed that of modifying or tailoring motivational programs for them.

An interesting finding concerning PSM is that it is not confined to public sector employees only; PSM is also found as a trait in some private sector organizations (Andersen & Kjeldsen, 2013). Opposite to the previous literature such as Bright (2008), Kim (2005), Taylor (2008), and Mostafa et al. (2015) who all assumed PSM to be primarily associated with job satisfaction in public sector, Andersen and Kjeldsen study (2013) pointed that this was not necessarily true especially after New Public Management was introduced during past two decades where private organizations produce some public services as in many countries, thus it became possible to find a job in the private sector which contributes to society. The study findings showed that PSM is positively associated with job satisfaction, and that Danish public sector employees have higher level of PSM and lower levels of user orientation compared to private sector employees investigated in the study (Andersen & Kjeldsen, 2013).

The concept of hard work

Opposite to PSM, which is considered a positive trait in public employees, Bullock et al. (2014) highlighted a negative trait in public employees as well as the non-supervisory private sector employees. The study examined whether beliefs of government employees differed from private sector ones (effect of sector) and also the supervisors compared to non-supervisors (effect of position) regarding opportunities in society being related or not to the concept of hard work. The study used data from the 2009 International Social Survey programme that included individual responses from 32 countries. Findings showed that government supervisors and non-supervisors in both sectors are significantly less likely to emphasize the role of hard work in getting ahead compared to the private

sector supervisors which was the only category from the four studied ones that emphasized that hard work is essential to get more opportunities in society (Bullock et al., 2014).

Although the positive effect of PDM on employee job satisfaction was proved by several studies such as Lange (2009), Van der Westhuizen et al. (2012) and Appelbaum et al. (2013), yet the mechanisms by which this effect is exerted is not much explored yet. The fact that many mediating factors such as cultural, personal, and work related factors affect this relation justifies the need for research in various work settings aiming to investigate factors affecting PDM. This study attempts to participate in filling that research gap by studying eight selected factors proposed to have effect on PDM and its relation with job satisfaction in private and public pharmaceutical companies in Egypt.

Chapter 3: Research Methodology

3.1 Conceptual Framework

The purpose of this section is to describe and discuss the definitions of the key terms used in this study, namely job satisfaction and the PDM, and outline conceptual framework to investigate the eight factors affecting PDM investigated in this study.

Job satisfaction: Despite the controversy concerning definition of this term and whether it is related to the perception inside the employee's mind or the interaction between the employee with his/her job, a popular definition for job satisfaction is that offered by Locke (1969) as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values" (Pacheco & Webber, 2016, p.185). Thus job satisfaction is the perceived relation between what the employee wants to gain from his/her job and what s/he actually perceives the job offers to him/her.

PDM versus 'employee voice': It is important to differentiate between two important interrelated terms 'employee voice' and 'PDM'. PDM is a more circumscriptive term compared to 'employee voice' which is a broad term that encompasses everything from information and consultation to union membership and managerially conferred mechanisms such as quality circles and financial participation schemes (Timming, 2015). Mitchell (1973) defined PDM as a process through which influence is shared among superiors and subordinates. Miller and Monge (1986) defined PDM as the extent to which an organization and its managers encourage employee input into organizational decisions (Probst, 2005, p.321). It is important here to mention that PDM does not mean employees necessarily having authority over broader organizational issues such as downsizing, but PDM provides employees with greater control over their own job tasks (Probst, 2005).

At the same time PDM gives employees a 'say' in decision-making. A management may initiate the level of 'say' when they expect benefit from that (Machington et al.,1992), or else the level of 'say' can be obtained by the collective power of employees and their trade unions (Timming, 2015).

The first research question in this study investigates the presence of a direct relation between PDM as an independent variable and job satisfaction as a dependant variable.

Factors affecting PDM selected to be assessed for the purpose of this study are categorized into two groups; the first are the employee-based factors, and the second group is the institutional-based factors

A. Employee-based factors

The employee-related factors chosen to be assessed in this study are as follows:

- 1- Employee's years of experience,
- 2-Employee's managerial level,
- 3-Employees' educational level, and
- 4- Employee's efficiency and skills.

Studying the effect of these four factors is used to answer the second research question stated in the introduction of this study. The interviews aimed to understand which factors from the previous four employee-based factors were found to affect employee's incorporation in the decision making process.

B. Institutional-based factors

This is the second set of factors affecting participative decision-making of employees. The four independent variables are presented as follows:

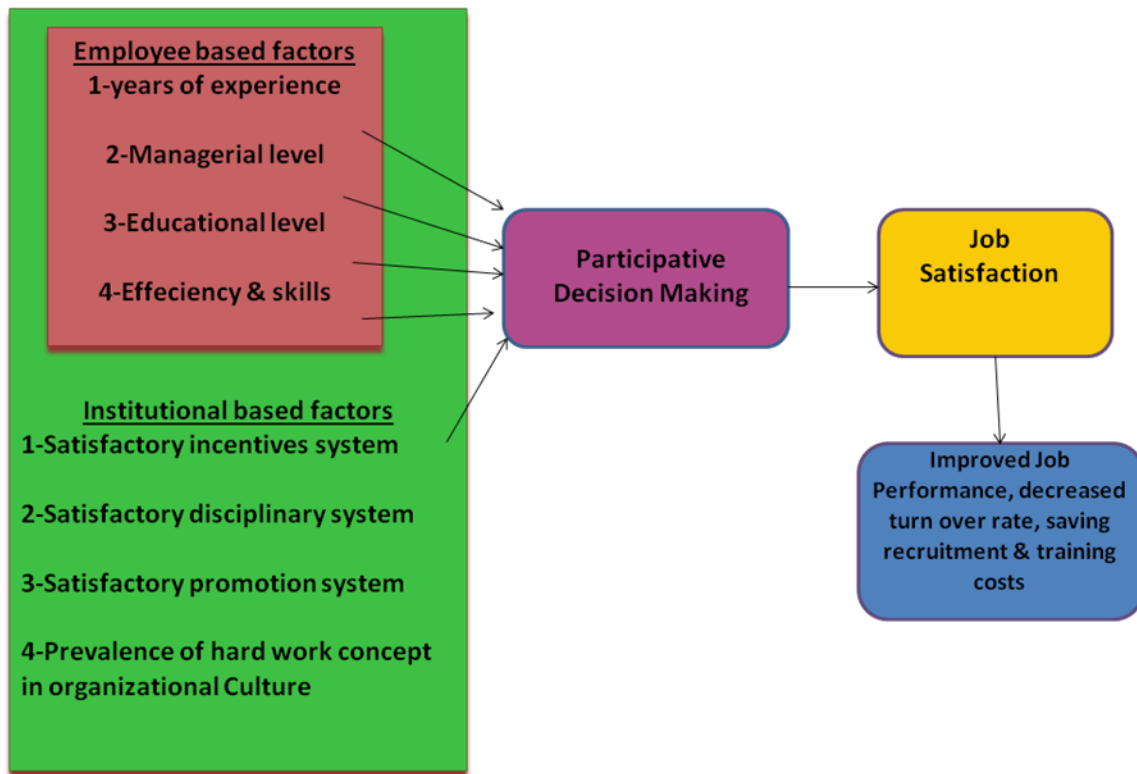
- 1-Satisfactory incentives system,
- 2-Satisfactory disciplinary system,
- 3-Satisfactory promotion system, and
- 4- Prevalence of "the principle of hard work" in the organizational culture.

Studying the effect of these four factors is used to answer the third research question of this study. Interviews aimed to investigate how these institutional-based variables affect PDM.

Besides, the effect of the “ownership type of the organization” is studied by comparing the system applied in the public company versus that of the private company regarding the incentives, disciplinary system and distribution of accountability, promotion system, and the principle of hard work. This comparison is used to answer the fourth research question of this study.

The conceptual framework comprising the employee-based factors, institutional-based factors, and the proposed relation between PDM and job satisfaction are schematically presented in Figure 2:

Figure 2: Conceptual Framework.



(Source: Author)

3.2 Qualitative analysis technique

This study was conducted using qualitative research technique. According to Strauss & Corbin, 1980 study, qualitative research refers to “any type of research that produces findings not arrived at by statistical procedures or other means of quantification. It can refer to research about persons’ lives, lived experiences, behaviors, emotions, and feelings as well as about organizational functioning, social movements, cultural phenomena, and interactions between nations.” (Strauss & Corbin, 1990, pp.10-11) Nevertheless, instruments for qualitative data collection may begin resembling quantitative ones; example for this is using the questionnaire for qualitative survey in which open-ended questions are used, or using a schedule for qualitative interviews when standardization across respondents is made (Punch, 2000, p.52). Thus, questionnaires were used in this study to lead the semi-structured interviews, open points for discussion, and to obtain answers for direct questions asking interviewees to assess to what degree they think the factors assessed in this study affect PDM.

Qualitative research aims to either explore a new field with little known about it or to gain a new understanding for that field. It has three major components: first, data which come from various sources such as interviews and observations, second, the procedures the researcher can use to organize the data and interpret them, which is usually done via conceptualizing data, reducing them, elaborating categories according to properties of the data, and finally relating the collected data to each other. This process is referred to as “coding”. The third component of qualitative research is producing a written report (Strauss & Corbin, 1990:13)

Qualitative analysis in the grounded theory method allows beginning a research study without having to test a hypothesis; instead it allows the researcher to develop a hypothesis by listening to what research participants say. Qualitative analysis deals about questioning rather than measuring. It is called hypothesis-generating study compared to quantitative analysis technique which uses statistical evidence to test hypotheses (Auerbach & Silverstein, 2003).

In this study, the researcher selected eight factors based on her work experience and observations in public and private pharmaceutical companies different from the two sample companies chosen for the purpose of this study to avoid bias. And qualitative analysis of data aims to answer the research questions and develop hypotheses about relationship between the eight factors examined in this study from one side and PDM from the other side.

According to Strauss and Corbin (1990), a qualitative researcher should adopt the following six traits during conducting research in what is called “characteristics of a grounded theorist”; “he/she should be able to step back and critically analyze solutions, able to recognize the tendency towards bias, able to think abstractly, flexible and open to helpful criticism, sensitive to words and actions of respondents, and finally he/she should have a sense of absorption and devotion to the work process” (Strauss & Corbin, 1990, p.6). Effort was made by the researcher of this study to abide by these six characteristics during conducting this research specially the principle of avoiding bias since each interviewee usually answers the questions based on his/her working experience, which might be affected negatively by a previous problem that faced him/her, thus ideas stressed upon by most of the interviewees in each company were elaborated in details in both Chapters 4 and 5 , while single complaints or information that was not approved by more than one interviewee were given lesser concern in the deduction of conclusions for this study because in such case there is a big probability for the source of information to be biased and there is no way to verify that except by conducting future research covering a larger number of interviewees.

3.3 Sampling strategy for companies selection

Two Egyptian pharmaceutical manufacturing companies, one from public and another from private sector were selected for the purpose of this study according to the following criteria:

Both companies should be licensed by the Egyptian Ministry of Health, thus making sure they follow the quality standards such as good manufacturing practices (GMP) as accepted by the Ministry of Health which conducts frequent inspection and monitoring for the pharmaceutical factories licensed in Egypt (Egyptian drug authority official website, 2016), and the two companies should be operating in the Egyptian market for at least five years.

The researcher selected two companies following the previous criteria and, in addition, she had contact person in each of them. This enabled the researcher to convey a feeling of trust to the interviewees about the good intentions of conducting the research. Interviewees were also reassured by guaranteeing the confidentiality of research results. The first company was a public sector pharmaceutical manufacturing company established in Egypt in the 1960s and located in Cairo. The second company was a private sector pharmaceutical company established in 2004 and started production in 2011 located in Sadat industrial zone near Alexandria.

The sampled public sector pharmaceutical company is referred to in the following sections of the study by the term “the public company”. And the sampled private sector pharmaceutical company is referred to by the term “the private company”.

3.4 Ethical considerations

Since the nature of the study questions ask employees and managers to criticize the management system which may put the interviewees in quite inconvenience, and as per the recommendations of the AUC Institutional Review Board (IRB) (copy attached) , thus the study data were displayed anonymously both for the company name and interviewees names.

3.5 Questionnaire design

3.5.1 Designing questions

Questions aimed to investigate in depth to what extent does the managerial system promote capacities of employees and managers to participate in the decision-making process. Questions investigated the work setting environment and focus was made on the eight factors affecting PDM assessed in this study.

The first section in the questionnaire aimed to obtain general information about the interviewees. All the thirty two interviewees answered in the beginning of the interviews questions about name, age, company name, department, managerial level, educational level, and since when they started working in the company.

The second section of the questionnaire was formed of 16 questions, The first five questions and question number 7 were closed-end questions asking the interviewee to give a grade from 1 to 5 concerning his/her agreement about the statement asked about in the question according to a 5 point Likert scale; with 1 referring to highly disagree with the statement, 2 refers to disagree, 3 is neutral, 4 is agree, and 5 is highly agree. The second part of each of these questions was open-ended asking the interviewee to explain reason for his/her answer.

Then question number 6 and questions from 8 to 16 were all closed-ended yes/no questions and the second part of each question was open-ended asking the interviewee to interpret his/her answer. Thus following the recommendations of placing “what” questions before questions asking about details like “how” questions (Punch, 2000, p.76).

Since the main aim of this study is to investigate how PDM can affect job satisfaction in a specific work setting (public and private pharmaceutical companies in Egypt), the first three questions were designed to ask about different forms of practicing PDM allowed for the employee to use (when interviewing non-supervisor employees) and given by the managers (when interviewing supervisors and managers). Each one of the three questions

asked about a facet related to PDM namely; autonomy in designing &/or modifying employees' own job tasks, having the ability to choose work mates, and allowing employees to submit suggestions for improving work performance. In addition, the fourth question in the interview was a direct question asking interviewee to give a grade from 1 to 5 for the degree of PDM given by the interviewed managers to his/her subordinates, or enjoyed by the interviewed non-supervisory employees.

Question 10 was designed to assess the effect of four factors namely years of experience, managerial level, educational level, and efficiency and skills on PDM.

It is worth mentioning that age was previously chosen as the first factor before the interviews, but it was changed during the study since all interviewees agreed that the proper nomenclature should be years of experience, since in some cases -specially in the public company- people take long years of vacation which should not be counted when assessing employee's experience. They said that being older does not necessarily mean having better experience.

3.5.2 Questionnaire translation

The questionnaire was translated by the researcher into Arabic language for better understanding of the research questions. Appropriate attention was given during the translation process to express the same meanings in the questionnaire designed first in English language for the purpose of this study.

3.5.3 Pretrial

The researcher performed a pretrial for the two questionnaire forms before commencing the actual study interviews that were included in the study results. A non-supervisory employee was interviewed using Annex I questionnaire, and one manager was interviewed using Annex II questionnaire. The two pretrial interviews were

performed in the public sector company, and owing to the far geographical location of the private sector company the researcher was unable to do a pretest for interviews there too. The two questionnaire forms were revised after the test interviews clarifying questions and adding some reaching to the final form used in the 32 study interviews thereafter. Questionnaire form for non-supervisory employees is mentioned in Annex I and that for supervisory employees and managers is mentioned in Annex II attached to this study.

During pretrial interviews when asking questions Q11, Q12, and Q13 which asked respectively if the incentives system, disciplinary system, and promotion system affects respondents participation in decision making, the interviewees were unable to recognize a direct relation, the two interviewees said that if we get a satisfactory incentives system then it will encourage us to contribute with our ideas in improving work performance, thus linking satisfaction about the pay system -not the pay system itself- to PDM. So the questions were modified to express this relation as in Annex I and Annex II, for example Q11 became as follows: Q11Are you pleased with the incentives system? Why? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

And the factors investigated were thus modified by adding the word “satisfactory” before incentives system, disciplinary system, and promotion system.

3.6 Interview design

3.6.1 Interview type

In-depth semi-structured interview was chosen to be used for data collection in this study since it gives the researcher the opportunity to clarify questions to each interviewee and identify reasons for interviewees’ answers. It also gave the researcher the flexibility to add questions during the interviewing process according to the information given by each interviewee. During interviews, questionnaire questions were asked and they opened issues for discussion that varied according to response of each interviewee. The researcher also welcomed further comments from respondents related to the research topic.

3.6.2 Sample selection for interviews

Sample size in grounded theory research cannot be determined before the study, “you keep interviewing research participants until you find that new groups of participants are not producing new data that add new concepts to your theory” (Auerbach & Silverstein, 2003, p.19). This is opposing to hypothesis-testing research in which the sample chosen should be large enough to get statistically significant results. Thus the researcher started the interviewing process without a specific number of interviewees in mind and continued to meet more interviewees till she found the answers repetitive and the new interviewees almost did not add new ideas about the research topic. This happened after interviewing 21 participants from the public company and 11 participants from the private company.

Snow ball method was chosen as the tool for interviewees' selection. Snow ball sampling means “identifying respondents who are then used to refer researchers on to other respondents” (Atkinson and Flint, 2001, p.1). In this method, as the name implies, the snow ball of study sample continues to grow as it rolls down the hill or as the interviewing process continues. It starts by interviewing convenience samples with whom the researcher has link and then they propose other people to be included in the study (Auerbach & Silverstein, 2003).

Atkinson and Flint (2001) concluded two main benefits for using the snow ball method for sampling selection; the first is to reach hidden and hard to reach population, and the second benefit is to help establish trust of respondents which is considered essential to collect accurate data. They also described snowball as an economical, efficient and effective sampling method, and can produce in-depth results relatively quickly. Regarding drawbacks, two main drawbacks were highlighted for this sampling technique; first, samples are not selected randomly which limits the capacity to generalize the study results to the whole population, and second is that similarity in some characteristics is

usually noticed within social networks meaning that “isolates” may be ignored this way (Atkinson & Flint, 2001).

To limit the previous drawbacks of snowball sampling technique, the researcher started by randomly selecting three departments without knowing any of their managers or employees, but then as ethics implied, the researcher interviewed the department manager first and he/she selected the next interviewees in the department, but then the researcher asked to add further interviewees to have different age groups and job natures, thus limiting the risk that the manager might only select the employees he/she trusts. Also in some departments -especially in the private company- all the department members were interviewed because of their limited number which also increases the ability to generalize the study results on the whole population.

Correlation between functions of departments and PDM

Choosing interviewees from various departments allows for examining if PDM is practiced by different levels in various departments. Certain departments -such as planning department, and Monitoring & Evaluation department if present - are expected to care more with assessing employees' opinions and applying PDM. But in the case of the sampled companies; the function of the planning department was mainly procurement of raw materials necessary for the production process thus they plan the production plan, while the whole policy of the organization was planned by the top management in both companies. Also, there was no Monitoring & Evaluation department in both companies.

Thus, the researcher selected three departments to begin interviewing namely departments of production, quality control, and registration to make interviews and compare results in the two companies. The three departments were chosen because they represent essential functional units in the operation of any pharmaceutical company, and since nature of work is quite different among the three departments In addition, during the interviewing process other departments were included in order to increase the interviewees' number and come up with more reliable data and increase the ability of generalizing the results to the whole population. So, in the public company department of export and department of planning were included, and in the private company,

department of quality assurance was included following the snow-ball sampling technique.

Before commencing interviews a criterion was set for accepting interviewees in the study; the interviewees in the two companies all had at least three years work experience in the respective companies, in order to have enough knowledge about work procedures there. At the same time care was taken to include variant age groups, educational levels, managerial levels and job natures in the interviews.

3.6.3 Establishment of trust and rapport

The researcher started each interview by identifying herself and her work place, which helped to build trust with the interviewees. Then the researcher briefly explained the purpose of the study and the fact that participation is voluntary and stressed on the confidentiality of study results reassuring interviewees that none of the data identifying them or their companies will be mentioned in the study results.

3.6.4 Physical arrangement for interviews and field work

Interviews were held at the factory of the public company. In case of the private company, interviews were made by telephone owing to the far geographical location of the factory from Cairo where the researcher lives and since each interview took 30 minutes in average, while some interviews reached an hour. The total number of employees interviewed in the sample companies collectively was 32 including 11 from the private company and 21 from the public company. At least one manager from each department was interviewed.

The researcher started the interviewing process in the public company by interviewing at least three employees in each department and at least one manager, then when started interviewing in the private company she realized that they recruit much less staff in each department to operate in a cost-efficient manner, so in some departments only 1 manager

and 1 employee were found. The number of interviewees from each department is given in details at the end of this chapter (respondents' profile).

3.6.5 Recording procedures

The researcher recorded in writing the answers of each interviewee in a separate questionnaire sheet during the interview. Voice recording was avoided since it can make respondents nervous and unsure about guaranteeing the confidentiality of research results. At the same time questionnaires were not distributed to respondents to answer questions on their own since in that case good understanding of the questions is not guaranteed. A total number of 32 interviews were made resulting in 32 filled questionnaires. Some questions were not answered by some interviewees and they are referred to by not available (n/a) in the chapter of findings and analysis.

3.7 Respondents' profile

The public company' interviewees included in the study were from five departments namely: Quality control, Production, Registration, Planning, and Export departments. The total number of interviewees was 21; including 12 employees (2 males & 10 females), 6 managers (3 males & 3 females), and 3 production labors (1 male & 2 females).

In total, the 21 interviewees from the public company included 6 males and 15 females.

To differentiate between the terms 'employees' and 'labors' used in this study; employees have high university education and they work in all departments in jobs not requiring physical effort such as production pharmacists, accountants, analysts, secretary etc, while the production labors worked in the production department in tasks requiring variable levels of physical effort and they do not necessarily need high education to get that job.

Age groups included were as follows: 1 interviewee in the age between 20-30, 10 interviewees in the age between 30-40, 4 interviewees in the age between 40-50, and 6 interviewees in the age between 50-60. The following Table 1 shows age groups in the managerial levels.

Table 1: Respondents' age groups and managerial level distribution in the sampled public company

Age group	Labors	Employees	Managers
20-30	0	1	0
30-40	1	8	1
40-50	0	2	2
50-60	2	1	3

Noticing that the respondents' profile contains a considerably large number of interviewees (eight) from one age group (employees in the age from 30-40) can be interpreted by the fact that the public company has been limiting the hiring process during the last 10 years -according to what the interviewees said- in an attempt for downsizing and controlling expenditure. Thus, the researcher met only one young employee in the age group 20-30, while the majority of the interviewed employees were older than 30.

And since the researcher has previously set the criterion before interviewing to include at least one manager and three employees from each department, this resulted in a majority of interviewees from employees who do not carry managerial or supervisory titles.

Private company' interviewees were from four departments namely: Quality control, Production, Registration department, and Quality assurance. The total number of interviewees was 11; including 3 employees (2 males & 1 female) and 1 production labor (female), and 7 managers (4 males & 3 females).

In sum, the 11 interviewees included 6 males and 5 females.

Age groups included were: 6 interviewees in the age between 20-30, and 5 interviewees in the age between 30-40, and no interviewees above the age of 40. The following Table 2 shows age groups in the managerial levels.

Table 2 Respondents' age groups and managerial level distribution in the sampled private company

Age group	Labors	Employees	Managers
20-30	1	2	3
30-40	0	1	4

It can be noted here by comparing the age groups in the two sample companies that the average age of the interviewed managers in the private company is much younger than that of the public company. Managers interviewed from the private company working as department heads were all less than 40 years old while department heads interviewed from the public company were all above the age of 50.

The rules preset in the methodology section for including interviewees were applied in the study as follows: all interviewees spent at least three years in their company, and at least one manager was included from each department.

The three production labors interviewed in the public company were 1 man and 2 women, two were above the age of 50 and one between 30 and 40 years old, and all have intermediate education. They worked in preparation and packaging in the production department. While the only production labor interviewed in the private company was a female, age less than 30 years, and acquired high education. She worked in the packaging of medicines in the production department.

It is worth mentioning that in the private company, male production labors worked in the preparation section while female production labors worked in the packaging section as the company was situated in a rural area and the management offers conservative environment as mentioned by the interviewees.

Chapter 4: Findings and Analysis

The aim of data analysis in this study is to answer the research questions and investigate the relationship between PDM and job satisfaction, and the effect of the eight factors affecting PDM preselected in this study, and how that affects employees' job satisfaction.

4.1 Data analysis approach

The study uses constant comparative analysis approach to analyze its data; an approach originally developed for grounded theory which involves taking one piece of data for example one interview, or one theme, and then comparing it with other interviews or themes to develop a concept about the possible relations between various data. The approach is a useful analysis process used to understand human behavior and experiences (Thorne, 2000).

In this study, a comparison is made between the opinions of employees versus managers and supervisors in each sample company, and a second comparison is made between the answers derived from interviewees of the public company versus those of the private one. The first comparison helps to identify whether employees and managers perceive the level of PDM given in their company similarly or not and it will help to identify the factors both employees and managers agree they affect PDM. The second comparison helps to identify the major variations between the management system applied in the public and private sample companies in what concerns the four institutional-based factors affecting PDM investigated by this study.

The ownership type of the company was expected to affect mainly interviewees responses about the institutional-based factors affecting PDM, but analysis of findings will also discuss whether the interviewee responses about the employee-based factors will be similar or not when comparing public and private sector employees' answers.

Answers of the interviewees for the 16 questions were classified as follows to be used in answering the four research questions mentioned in the introduction chapter.

To analyze the relation between PDM and job satisfaction, the following questions were used:

Q1, Q3, Q4, and Q9 were used to assess the degree of employees' participation in decision making in the company.

Q7 is used to assess the degree of employee satisfaction regarding management system and regarding their job nature.

Q16 is a direct question about the relation between participation in decision making and the job satisfaction.

To investigate the employee-based factors affecting PDM, the following question was used:

Q10 was used to assess to what degree do managers and employees consider the following factors important to be considered by a manager when consulting his subordinates in the decision-making process: years of experience, managerial level, educational level, and efficiency and skills.

To investigate the institutional- based factors affecting PDM, the following questions were used:

Q11 used to assess employees satisfaction regarding incentives system.

Q12 used to assess employees satisfaction regarding disciplinary system and distribution of accountability.

Q13 used to assess employees satisfaction regarding promotion system (whether depending on years of experience or more on efficiency).

Q14 used to assess the presence of the principle of hard work in the organizational culture.

Q15 used to assess whether "equity in pay whatever performance" exists in the organizational culture.

Besides, the following additional questions were included in the interviews since they were related to the study context:

Q2 used to assess if employees were allowed to choose their work mates or not.

Q5 was used for assessing satisfaction regarding training requirements

Q6 was used for determining whether the company uses employee satisfaction survey or not.

Q8 asked about the degree of delegating authorities to department heads.

Q9 was used to assess the pathways available for employees to convey opinions or complaints to the top management, like requesting personal meeting, via labor committee members, etc.

4.2 Analysis of data

4.2.1 Assessing PDM and its pathways

Assessing PDM

The term PDM entails various forms; according to the classifications of PDM forms given by Wood et al. (2012) and Elele and Fields (2010) as mentioned in Chapter 2, the study recognizes four forms or pathways for practicing PDM in an organization. The first form is autonomy in setting/modifying job tasks and this is done by adjusting job design to allow for greater employees responsibility and discretion (Wood et al., 2012). The second form of PDM is voluntary voice expression and this is done by encouraging and welcoming employees' voluntary suggestions regarding improving work performance (Wood et al, 2012). The third form of PDM is consultation where managers demand employees' opinions prior to making decisions (Elele & Fields, 2010). And the fourth form of PDM is representative participation via a union or staff association (Elele & Fields, 2010).

Interview results showed that the majority of interviewees from the private company (both employees and managers) gave high grades in response to question Q3 asking

about the degree to which employees are allowed to submit suggestions to improve work performance and if they are considered seriously by the management; they gave grades greater than or equal 4 in a scale of 1 to 5 for the level of PDM they perceive in their company in the form of voluntary voice expression and in the form of consultation. Private managers welcomed their subordinate participation and that was clear from their quotes; for example "If any of my subordinates give a suggestion and I find it useful, I will definitely apply it".

Although Q3 asked about voluntary submission of suggestions by employees, but the interviewed private managers added that they do not wait for those voluntary suggestions, instead they consult their subordinates on a continuous basis. All the 7 interviewed managers mentioned they ask their subordinates to give suggestions for solving issues arising in the work setting; for example one of them said "When I face a problem I shock my team with it, and ask each of them to come up with a solution". Private managers gave interesting reasons for their care about consulting their subordinate teams for example one of them said about his subordinates "they can come up with a new use for a device" and another one said "a labor may give me the solution for a production problem he has more experience in", and a third one said "this will give them a chance to be creative in their work then we discuss their suggestions".

While in the public company the interviewees' answers (employees and managers) to Q3 varied greatly among departments; some employees gave low grade (1 in a scale of 1 to 5) while majority gave moderate grade (2.5-3 in a scale of 1 to 5). Managers gave high grades for PDM they allowed in their departments and said they welcomed any suggestions, while employees gave much lower grades for PDM they feel they practice, for example one employee said "I do not submit suggestions because I know no one will consider it seriously" and another one said "I submit suggestions and they either consider it or not", while one of the managers said "if someone wants to develop a work process he/she can" and another one said "I always welcome suggestions but considering them depends on their value".

Table 3 shows a comparison between answers of interviewees from the two companies for Q3 To what degree are you allowed to submit suggestions in order to improve work performance? (Give a grade of 1 to 5)

Table 3 Interviewees responses regarding to what degree does the management system allow employees to submit suggestions for improving work performance

	Private employees	Private managers		Public employees		Public managers
No. of interviewees	3 interviewees	7 interviewees		12 interviewees		6 interviewees
Grades given on a scale of 1 to 5, with one the lowest grade.	4.5	4.5	4	1	4	5
	4.5	5	4	1	4	4
	4	4	5	n/a	4	4
		n/a		5	2.5	n/a
				2	2.5	1.5
				n/a	2.5	5

In sum, Interviewees answers to Q3 showed that the second form of PDM ‘voluntary voice expression’ and the third form of PDM ‘consultation’ were practiced in a limited to moderate level in the public company, but were practiced extensively in the private company, and most private employees and managers were aware of its use and benefits.

Regarding the first form of PDM ‘autonomy in setting and/or modifying job tasks’ (asked about in Q1 of the questionnaire), interviews in the two companies showed that this form of PDM varies greatly from a job to another; the majority agreed that employees get this autonomy in the tasks they already have experience in, while the new tasks require supervision from managers to avoid mistakes.

And regarding the fourth form of PDM ‘representative participation via labor union’ (asked about in Q9 of the questionnaire), the private company did not have one owing to the small number of employees while the public company had a labor union but the

majority of interviewees mentioned they do not have any role to convey their suggestions for solving work issues but 2 of the interviewees mentioned they helped them in personal requests.

In answering Q2 (which asked to what degree are employees allowed to choose their work mates), interviewees from both sample companies revealed that this is much related to the job nature since in some departments; individual work is the prevalent for example the analysts in the quality control, while in the production department work group is needed. A private manager said that giving them the freedom to work with the ones they prefer improves the work output, while a public manager said this will not guarantee equal distribution of tasks.

And in answering Q4 (which asked the interviewee directly to give a degree for PDM allowed in the company), almost all managers and employees in the public company said it is the responsibility of the managers of the company to take decisions. While in the private company; private managers and employees added that they leave decision making for subordinates only in tasks they are experienced in.

In sum to the previous analysis, interviews revealed that employees in the private company enjoy a higher degree of PDM compared to those in the public company who experienced a limited to moderate degree of participation in decision-making process.

Pathways for PDM

Pathways for PDM identified in the interviews were: periodic meetings and written surveys. They were used in the private company much more compared to the public company.

All interviewees from the public company replied “no” in response to Q6 asking about the use of employee satisfaction survey in the company to assess their satisfaction in their jobs. They also mentioned that meetings with top management were not made on regular

basis, but the door was always open between employees and their managers inside the department.

In the private company interviewees said there was a regular meeting for company managers at a fixed day every week to discuss work procedures, and then meetings were performed inside each department but with varying frequency (approximately once per month). About the use of employee satisfaction survey the results varied according to department, some said it was done verbally, but in the production department they said they completed a written survey.

In sum, the private company uses more pathways for voice expression and participation in decision making compared to the public company.

Avoiding concentration of decision-making

Organizations are advised against concentrating decision making; whether in the form of 'monarchial' organization where decision making is concentrated in the hands of a single manager, or as 'aristocratic' organization where power is in the hands of a small group of elite managers (Timming, 2015). Instead, organizations are recommended to transform into a 'polity-like' organizational structure in which the strategic leaders are charged with the perpetuation of the organization, and in case of private sector they are charged also with organizational growth. At the same time, the strategic leaders have the right to reward or punish their subordinate employees by extending or withholding their participation in decision making process. Those ideas were discussed by Timming (2015) who considered the concept of 'citizenship' as being integral to the 'best regime'.

In order to avoid concentration of power in the hands of a small group of elite managers as recommended by Timming (2015), the following alternatives were recommended by Applebaum et al. (2013) as a solution to increase employees' participation in decision-making:

(1) Sharing information with all employee levels about the company current activities and challenges. That will help to build trust in management and increase employee satisfaction and accordingly lower their intention to quit.

(2) Create autonomy by facilitating useful information exchange between employees and managers regarding employees' view of job conditions and company's goals, customers, products. According to employees' feedback, managers can then decide whether to empower them or give them further training and information regarding the company operations.

(3) Replace the old hierarchical structure with self managed teams, thereby, leveraging responsibility at the self –managed team level which improves effectiveness in communication and ultimately the productivity. (Applebaum et al, 2013)

4.2.2 Employee-related factors affecting PDM

When answering Q10 of the questionnaire “In your opinion, which of the following factors has to be considered by the manager when consulting his/her subordinate employees prior to decision-making: age/years of experience, managerial level, educational level, efficiency and skills?”, results of the private company came similar to a large extent to those of the public company as described when discussing each of the factors in details below.

All interviewees in both companies commented that “age” was not a factor to be considered to affect PDM; instead “experience” was the proper nomenclature, since years of vacations or work in a different field should not be included when assessing the personal skills growing by time at the work place. Depending on this, the first factor was renamed to be “experience” which refers here to years of experience at the same work field. Table 4 shows interviewees' answers for Q10 showing the number of employees and managers from the two sample companies which considered each one of the assessed employee-based factors in the study.

Table 4: Number of interviewees considering the employee-based factors important to affect PDM

	Private employees (Total 3)	Private managers (Total 7)	Public employees (Total 12)	Public managers (Total 6)
Years of experience	3/3	4/7	6/12	3/6
managerial level	1/3	2/7	4/12	6/6
Educational level	1/3	3/7	4/12	5/6
Efficiency & skills	3/3	7/7	12/12	6/6

Experience

In the private company the majority of interviewees said experience in the same field was an important factor affecting PDM. On the other hand, in the public company, half of the total interviewees (employees and managers) chose this factor to be an important one. In addition, many interviewees in the public company highlighted that efficiency was usually linked to experience, as the more efficient and skilled people at work usually had a longer period of experience.

Since more than half of the interviewees in the two companies collectively chose experience to be the second important factor to be considered in PDM process after the factor “employee’s efficiency”, the study concludes here it is an important factor affecting PDM.

Managerial level

Comparison between the opinions of public managers versus the private managers:

This factor was perceived differently by the public managers compared to those in the private company; while the public managers saw it as a considerably important factor (all six interviewees said that), the private managers did not regard having a higher job title as an important factor (only 2 of the 7 interviewees saw it important). The private managers thus were looking more equally at all their subordinates when it comes to considering

their opinions prior to decision making. This can be explained also by the flat organizational structure they adopt as they mentioned during the interviews.

Comparison between the opinions of public employees versus the public managers:

While all public managers interviewed chose managerial level as an important factor, only one third of the public employees saw it important, stressing that young employees who were not promoted yet wanted to participate more in the decision-making process. This can be explained by the long duration needed to get the first promotion in the public company which ranges between 8 and 14 years of work.

In sum, in the private company only one third of the interviewees saw managerial level as an important factor affecting PDM. At the same time, in the public company, only half of the interviewees chose this as an important factor.

Educational level

In the private company only five (two employees and three managers) out of the 11 interviewees saw educational level as an important factor affecting PDM. Similarly, in the public company, only half of the interviewees in total (employees and managers) chose this factor to be important.

Efficiency and skills

In the public company: all the interviewees interviewed chose efficiency as a main factor to be considered when considering employees participation in decision making.

The same result was obtained in the private company where all the interviewees stressed it's the key factor to be considered here, since a person can take a job title higher than another one who is older than him/her since in private sector what determines the position is the efficiency and skill according to what the private managers said during interviews. A public manager stressed this is the most important factor to be considered in PDM saying "efficiency is the most important factor; I need to benefit from the unique skills of each one of them".

Although educational level and managerial level were given much less consideration compared to efficiency and experience by the interviewees in the two sample companies, several interviewees mentioned that the four factors should be considered justifying that by the fact that an employee can give useful idea because of an educational course he got, while another one can solve work issues because of his long experience, and because higher managerial levels are attained either due to high efficiency or long experience or both.

For example a private manager said “all four factors are important but not necessary to be found in one person, sometimes the issue needs experience other times new ideas can be helpful”, and a private employee agreed to the idea saying “He/she has to consider the opinion of all the staff in what each one is good at, if it is a question about a machine for example an experienced labor can give a better opinion than an employee with high education but no experience”, and a third private employee also agreed saying “manager should consult everyone, the experienced employee sure can benefit more, but also the one with less experience can come up with a good idea.”

Similarly, a public manager shared the same opinion that all four factors are important “a production manager can listen to a labor’s opinion”, and another one agreed justifying that this decreases resistance to new systems “sometimes I consider all the team opinions so that no one objects later on”. Moreover, a public employee added the importance of considering all opinions to avoid bias, “If efficiency only is regarded, the manager’s opinion will be subjective”, and another one highlighted valuable opinions that could be obtained from labors with moderate education “We learned work details from people who did not get high education.”

Thus, the study concludes here that the two factors "years of experience", and "efficiency and skills" affect PDM in public and private pharmaceutical companies, while the other two factors "educational level" and "managerial level" need further investigation by future studies to assess their importance.

4.2.3 Institutional-related factors affecting PDM

In answering questions Q11, Q12, Q13 and Q14, majority of interviewees from the two companies agreed that satisfactory incentives system, promotion system, disciplinary system, and the prevalence of hard work concept in the organizational culture leads to increasing their participation with their company management by sharing more opinions voluntarily in order to improve work performance. This satisfaction was more prevalent in the private company compared to the public company; since private company interviewees announced that they were appreciated morally and rewarded financially when they provided good ideas that benefit work setting and productivity. Each of the four institutional-related factors is discussed as follows:

Incentives system

Owing to the variance between the pay system used in the two types of companies as revealed during interviews, this part of the study aims to identify which pay system satisfies the employees more and encourages their participation in the decision making process.

The first system was “linking pay to performance” which was applied in the private company. The monthly appraisal of the employee’s performance was made by his direct manager and the factory manager; it was then averaged at the end of the year, and based upon that average the percentage increase in salary was determined (up to 20% increase in the whole salary annually), this was beside another fixed annual raise of 10% given to all employees at the middle of the year independent from the performance. The system does not give managers the right to deduct from the salary as it might vary from a tough manager to a more lenient one as expressed during interviews.

The second system was the “fixed pay system” applied in the public company. Although there was a monthly appraisal system, it affects only the promotion system. And, although the regulations allow managers to deduct from salaries of their subordinates,

most managers did not do that since they had no means to reward the good performance either.

Interview results with the private company managers and employees showed a majority of acceptance to the pay system; they were pleased mainly because each manager discussed with each subordinate employee about his/her performance appraisal results showing the strengths and weaknesses in his/her performance during work. This was lacking in the public company where the performance appraisal was considered a top secret issue sent in closed envelopes from the sector head to the administration department and not discussed with employees.

Nevertheless, answers to Q11 and Q15 showed that the majority of public employees and managers interviewed in this study were pleased with the fixed pay system since it decreased the effect of managers' bias or favoring some employees over others without a clear reason. Some employees said there was a time when managers were capable of giving financial rewards to the excellent performers but then employees were not all satisfied with it. Also, the managers' responses varied; for example, one of them was not pleased with the pay system for not being able to reward the best performers, while another manager was pleased with the fixed pay system saying that bonuses should be for all department members as reward for group effort and not the individual effort.

At the meantime, the young employees (age less than 40) in the public company strongly declared that equity in pay whatever the performance leads to strong discouragement to the hard workers thus demanding extra compensation based on performance (for example based on number of samples analyzed per day), and many of them said that "working here equals not working". One employee (age 25) asked even for non-financial rewards such as giving the good performers an extra week vacation per year.

Also, it was found from the interviews that the production department in the public company was facing a problem retaining its labors and employees since many of them apply to leave the department to go on vacation or move to other departments where the

work load and health hazards were much lesser. Since in both departments they would receive almost the same pay, and the bonus for production labors was considered trivial. A public manager demanded extra financial remuneration for departments with heavy work rate “work in my department does not stop, while other departments have much less work to do, how come we get treated equally? Each one must have a target to achieve”.

In sum, although the interviewees from the public company were pleased about the fixed pay system since it decreases managers’ bias, the pay system applied in the private company was found more satisfying to the employees and managers since it encourages everyone to work. The fixed pay system in the public company was relieving to everyone yet did not motivate them to work. Equity in pay whatever performance discourages the good performers since they will be treated equally to those with less skill and those who spare their efforts. This was further exaggerated by the fact that the only thing which gives privilege to the good performers currently was the promotion system, which takes quite long time to have effect since the first promotion in the current system takes place after eight years of service.

In the public company, equity in pay whatever performance was a source of dissatisfaction, for example a public employee said “there is no extra pay for me if I always finish more tasks compared to my colleague”. In the private company the managers declared much concern with the periodic performance appraisal to encourage good performers, for example a private manager said “there is one who finishes his task and ask for more, and another one who acts as if he/she works so that I don’t give him more tasks, so I cannot treat them equally in the performance appraisal”, and another private manger referred to religious principles that urges to appreciate variant skills and capacities saying a verse from the holy Quran : "Are those equal, those who know and those who do not know?" (Surat Az-Zumar (39), verse 9)

Disciplinary system and accountability distribution

The answers to Q12 revealed that the majority of interviewees from the private company were pleased with the disciplinary system. On the contrary, only half of the public employees and two third of the public managers were pleased with the system. The displeased public managers mentioned in the interviews that they regretted not having a more strict system that creates better discipline in the company. For example one of them said “private sector’s disciplinary regulations are stricter than ours that is why they have discipline while we do not”, another one explained the inability to implement disciplinary regulations in public companies since managers cannot also reward them if they excel in their work “I don’t deduct from their money since I also cannot give them extra rewards”.

While the public employees were logically pleased with the lenient disciplinary system since they were not punished mostly, one of them said “Disciplinary system is good, mistakes are forgiven once and twice then penalized for, the penalty is away from the financial incentives”, another one expressed dissatisfaction from localizing accountability on top management thus marginalizing younger employees “the legal accountability is centralized on the sector head and the general managers, everyone below them have no real accountability even if they sign a document, this is compared to the private sector where accountability is distributed or delegated to subordinates which also trains them to be managers”, and a third employee mentioned that the company cares about attendance more than they cared about performance “the disciplinary system is over strict, penalties are too hard compared to the fault committed for example being late for six times each not exceeding thirty minutes removes the whole monthly incentives.”

On the other hand, in the private company, employees mentioned everyone gets penalized once he/she does mistakes at work, some were dissatisfied because of that but the majority accepted it since they saw equity in applying the system. For example, a private employee said “penalties are applied on everyone equally so it is not upsetting”, another one also said “It is very tough but they do not penalize in the training period and anyone who does the same mistake gets the same penalty”, and another justified the need for

penalization to minimize error in production since medicines affect people's lives "the small mistake in a drug factory affects many things".

Private managers were aware of the legal responsibility they carried, so they justified the need for strict disciplinary system to minimize error at work. In this regard, one of them said "the legal responsibility inside and outside the company lies on me, i.e., the department manager if I am not aware of my subordinate's mistake, but if I discover the mistake before it goes beyond my authority I penalize the person who did it if it is a case of careless conduct". Only one private manager undervalued the need for disciplinary system "penalization should be in very few cases because it does not benefit much, the moral penalty is more important".

In sum, private employees and managers were aware of the idea of distributing accountability on managers and their subordinate employees. So, everyone in the private company was held accountable for his/her work and gets penalized in case of careless conduct. Oppositely, penalization in the public company was performed on a limited scale and avoiding deducting from the pay and legal accountability was localized in many departments only on the top management.

Promotion system

The Q13 in the questionnaire aimed to compare the promotion system in the two companies. Interviews revealed that the system in the public company depends mainly on years of work in the company as the first and main criteria, and then comes to the efficiency. While in the private company, although many employees did not get promoted administratively, they knew their position in the hierarchy, so most of them were acting in the positions they would be promoted to in the future. That was why the organizational structure was more flat as it was rare to find beginner employees, as most of them already were carrying higher titles for example: (senior analyst, supervisor, department manager, and section head)

Assessing employees' satisfaction about the promotion system resulted in the following: Only 5 out of the 12 public employees and 3 out of the 6 public managers were satisfied with the promotion system. The same situation was found in the private company where only half of the employees and managers were satisfied from the promotion system.

Those who favored the current promotion system in the public company gave the following reasons: "Seniority is good to avoid managers' bias favoring some employees over others," and "Seniority is good to avoid personal bias". Those who were not satisfied with the promotion system told me the following: "Any organization to be successful it should depend on efficiency not seniority," "We do not know based on what some people were promoted!", and "It depends on the annual appraisal system because if you do not get A in the previous two years, your promotion will be delayed".

The three public managers who were satisfied gave me the following reasons: "90% get promoted because of seniority plus efficiency, and only 10% are promoted although not efficient", and "Seniority first then efficiency". The other three managers were not satisfied because of the long time needed for promotion and the lack of sufficient positions in the hierarchy to promote everyone who passed the years of work needed, one manager said, "How can I be acting department head with big responsibility when I still have to wait seven years to get my promotion", and the quality control manager said "I have many efficient people but I cannot promote them all, I need more positions for them". This last comment showed an interesting observation because quality control department was the only department whose manager declared they have many senior employees more than needed in the managerial hierarchy that she cannot promote them all although she wanted, this is in contrast to other departments such as the production department which suffered extreme lack of necessary managers, labors and employees who complained about occupational health hazards, high workload and non-proportional financial remuneration.

In the private company, half of the employees and managers were pleased with the system and gave the following reasons: "everyone gets promoted, they do not bring someone

new to a high position", "after two and half years to three years you carry a title, then after two years you get a higher one. The section head spent here four years".

Private employees and managers who were not satisfied provided the following statements: "It is slightly slow", "I do not know how it goes but it is not by passing a fixed number of years", "There are no promotions".

Summary of the comments regarding the promotion system in the two companies:

Promotion system in the sample public company was really slow; employees must spend eight years to get the first promotion (called the second degree), then six more years to get the second promotion (called the first degree). These two steps are dependent mainly on years of work. Thus, employees need to pass at least 14 years to apply for the first managerial position (department director), lower titles such as (senior, supervisor) were not used. So, employees spent their first 14 years of service life without real accountability in some departments. Compared to this, employees in the sampled private company could be promoted based on their efficiency but also respecting seniority, thus most of interviewees mentioned they are held accountable for their work and thus care more about it.

Concept of hard work in organizational culture

Answers to Q14 "does the principle of hard work exists in your organizational culture?" was much affected by the idea of fixed pay system in the public company. Thus, although the study found all interviewees from the private company without any exception answering "yes", the responses of the public company employees and managers varied.

In the private company, employees pointed to the importance of the orientation they got prior to starting work and also the importance of rewarding employees fairly, this affects positively the prevalence of hard work concept. For example, a private employee said

"When I started working here, we knew what it means to work in medicine manufacture and we have responsibility, one of us can take that medicine bottle to his/her son so he/she thinks before doing anything wrong. People work overtime happily since they are rewarded financially and morally". Another employee said it is because of the encouragement they get from their management to share their thoughts (i.e. because of the high PDM level they perceive) she said "I worked previously in another private company where people really spared their efforts; they saw the mistakes and did not correct them because they are not obliged to do this. It is not an issue of private and public but an issue of successful management that makes employees feel they are part of the company". At the same time, private managers stressed on the role of disciplinary system here to ensure hard work prevails in his department; he said "People are cooperative and if one of them does not want to work I won't let him/her do that".

On the other hand, in the public company, only half of the interviewees (7 out of the 12 public employees and 3 out of the 6 managers) answered "yes" to Q14 implying that a considerable number of workers respect the concept of hard work and apply it. The remaining public employees and managers said that it varies from a person to another. A public employee said, "Some work hard, others not", while another one said, "Everyone says I will work as much as they pay", and a third one said it is not because of lack of desire to work but since the workload does not need much time; he said "This is because workload is not big". One public manager justified the lacking hard work concept by the insufficient financial remuneration for extra work which makes managers also incapable of applying disciplinary system to them if they refuse to stay overtime for example, she said "How can I tell a labor to work over time to take 25 LE only, In the government I cannot punish those who don't work". Other public managers who defended the idea that hard work concept exists also related that it varies among employees; one of them said "Some are active, others are not, but the more common is that people come with the desire for work".

4.2.4 Assessing Job Satisfaction

The previous discussions about various aspects of the managerial system used in the sampled public company should multiple sources for dissatisfaction for public employees interviewed in this study. Mainly younger employees (age less than 40) criticized the management system greatly and explicitly gave a low degree of satisfaction mainly because of equity in pay whatever performance, localizing accountability and decision making in the hand of managers mainly, slow promotion system, low degree of consulting employees prior decision-making and not giving them enough chance for voice expression to improve work performance. At the same time, the interviewed public managers were relatively more satisfied compared to their subordinates regarding the same issues of incentives, promotion, accountability and PDM. They justified that by the moderate pay given in public sector accompanied with moderate work load and that if they move to private sector they will have to work harder with similar financial remunerations claiming that private sector consumes the staff efforts and does not compensate them fairly. The fact that most public managers interviewed were above age of 50 affect this result greatly since at that age most of them were unwilling to compare job benefits to those in the private sector and preferred to stay in their positions till they go on pension. The younger public employees on the other hand always held the comparison with private sector during the discussions. In addition, two out of the 12 public employees interviewed in this study announced their intentions to leave their jobs and mentioned they were looking for opportunities in the private sector, these two employees were 26 and 37 years old.

Table 5 shows a comparison between answers of interviewees from the two companies for the first part of Q7 "To what degree are you satisfied regarding the company's management system? (Give a grade of 1 to 5)"

Table 5 Interviewees responses regarding their degree of satisfaction from the company's management system

	Private employees	Private managers		Public employees		Public managers
No. of interviewees	3 interviewees	7 interviewees		12 interviewees		6 interviewees
Grades given on a scale of 1 to 5, with one the lowest grade.	5	n/a	4.5	3	1	n/a
	5	4	3	1	1	3
	4.5	2.5	4	n/a	2	3.5
		4		2.5	2.5	2.5
				2.5	2.5	2
				4	4	3

Interviewees' answers regarding job satisfaction are discussed in details as follows in the public and the private sample companies.

Job satisfaction in the public company:

When interviewees in the public company were asked a direct question (Q7) asking them to give a grade from 1 to 5 for the degree of satisfaction they feel regarding their company's management, the answers of the public company interviewees were clearly different from that of the private company interviewees specially when talking about younger employees (age less than 40).

Starting by the public employees interviewed in this study, most of them were not satisfied from the management system (gave 1 to 2.5 from a scale of 1 to 5). Main complaints were slow action from the management regarding complaints. One public employee said "They do not react until people arise." Another one criticized plans for reform in the company saying "If each chairman takes a department and focus on improving it during his management period; for sure the company will be much better." A third one criticized the working conditions in her department specifically saying "Most

of the employees in the production department are unsatisfied compared to other departments with less health hazards and almost same pay.”

In addition, the three production labors who were interviewed in the public company complained from the small extra financial rewards given to them compared to other departments; since they consider the nature of their work was harder and the health hazards they might face were greater, that was the reason why many labors applied to move to other departments when they got the opportunity according to the interviewees. One of them also complained from inequity in applying nepotism when hiring new employees while he wanted to hire his daughter too.

When we turn to the public managers interviewed in the study we find they gave a moderate degree of satisfaction with the company management system (average 3 in a scale of 1 to 5) but at the same time they gave a variety of sources for dissatisfaction when justifying their answers. One manager criticized the management system saying "Not all decisions are good". Another one was satisfied about the system saying "the management system here is better than private sector where people work more without better financial remunerations", while a third manager complained from acting department head but since she was still relatively young (37 year old) she did not pass the minimum number of years required to get that promotion according to the regulations, so did not receive financial remuneration from acting department head. She also complained from the equity in pay in various departments whatever the work load asking for incentives based on performance. Finally a fourth manager blamed the Holding company for pharmaceuticals for delaying the operation of the automatic system designed to link various departments inside the manufacturing company.

In sum, it is reasonable to say that the young public employees interviewed (age less than 40) were less satisfied about their company management while the older employees and managers (age more than 40) were more satisfied.

Job satisfaction in the private company:

All employees and managers interviewed from the private company were highly satisfied with the management system of their company. In answer to Q7, all three employees and the labor gave the highest grade (almost 5 in a scale of 1 to 5). Employees praised the manners of the managers and one of them said “Management is cooperative and they treat us with respect.” Another employee admired that she gets encouraged for her work performance saying “because I am clever, I got privileges others did not get”. And a third employee admired that management cared about suggestions to improve work performance referring that to religious reasons saying “the management encourages the correct work performance even if it will delay production, they please God”.

At the same time, 4 of the 6 managers gave results above 4 in a scale of 1 to 5, and the other 2 managers gave 2.5 and 3 in the same scale. Positive points highlighted by the interviewees were the high responsibility and autonomy managers enjoy in their jobs, and that each department head has the upper hand to manage his/her department conditions. This is clear in the words of one private manager who said “The management gives a very good opportunity for each manager to adjust conditions of his/her department”. Only one manager criticized management system saying “I am not completely satisfied from the management because they don't react equally to employees' requests.” Furthermore, all interviewed private managers and employees declared they did not intend to leave the company any time soon. One manager said “I am moderately satisfied but happy and do not intend to leave”.

In sum, employees and managers of the private company were satisfied to a high degree from their management system, while those from the public company were satisfied to a low to moderate degree from their management system.

Satisfaction from job nature

In the public company, most of the interviewed employees and managers were satisfied regarding their job nature, only two employees in one department suffered dissatisfaction

because of their job nature since they were science graduates and the job needed accounting skills. They explained that by saying that the company is limiting hiring of new employees trying to downsize the human resources. This means that the company did not advertise for vacant positions according to the qualifications needed in it, instead they filled positions by relocating employees internally without much regard to their educational background. Also because nepotism plays a big role in previous hiring according to the three interviewed labors they mentioned that the company management at that time appoints new production labors by contracts but if they have high education they would not get the contract unless they submit a notarized written undertaking that they would not ask to move to other jobs in the company. Although that seemed unfair from the interviewees' point of view, the management justified it by the downsizing efforts to decrease labor expenses.

Oppositely, in the private company all employees and managers interviewed were satisfied to a high degree concerning their job nature.

4.2.5 Relationship between PDM and Job satisfaction

From the previous assessment the private company employees and managers enjoyed a higher degree of both PDM and job satisfaction compared to employees and managers in the public company. This supports a positive association between PDM and job satisfaction. This goes in agreement with findings of Applebaum et al. (2013) whose empirical findings illustrated that insufficient participation (as independent variable) were related with low level of employee satisfaction (as dependent variable). The study also found that employees' satisfaction (as independent variable) affects positively employee commitment (as dependent variable). In turn the study found that the higher employee commitment (as independent variable) leads to lower intention to quit (as dependent variable) (Appelbaum et al, 2013).

Also, by asking interviewees a direct question if they think that PDM can increase their job satisfaction (Q16); nearly all interviewees in both companies answered "yes" which helps

to support the positive relation between PDM and job satisfaction. They justified this positive relation by saying that PDM increases employee's self trust, creativity and productivity. For example a public manager said "Sure it will increase the employee's productivity and he/she will be more creative at work", and another one said "Yes sure this follows the common sense". Almost all public employees agreed to the positive relation between PDM and job satisfaction and one of them simply said "It increases my self-trust". The exceptions were three public employees out of the 12 interviewed as they were more conservative in their answer stressing that voice expression should not be turned into chaos; she said "to share my opinions is good but not to the extent of chaos." Another public employee tied the effectiveness of PDM with the presence of a management that considers opinions, she said "It is correct on condition that they listen to me and consider my opinions."

In the private company, interviewed employees strongly agreed that PDM increases job satisfaction, pointing to the importance of consultation of everyone in the company whatever their education and experience as this will make them feel appreciated, one of them said "the technician can work carelessly and mess the job if he wants but if you consider his opinion he will feel respected and improves his work", while another one pointed to the importance of the manager role in coordinating the process of PDM saying "If the manager is not firm enough, then giving chance for many opinions with out coordinating between them and deciding what will be done will create a problem and struggle of opinions".

Similarly, the interviewed private managers agreed to the statement in Q16 for the same reason which was enhancing sense of appreciation in employees and will benefit work performance and manager's decision at the same time, he said "this will benefit the manager himself/herself and the employee will feel appraised", another manager said this would increase employee's sense of accountability as he said "when they give their opinion they will be committed to make it work" and a third manager agreed to that opinion saying "They will be satisfied, and the responsibility then will be doubled over them, so it will benefit the work place".

4.3 Awareness about the role of public sector in realizing public benefit

Interviewing process in the public company found higher degree of awareness at the managers compared to younger employees regarding the role of public sector in realizing public benefits. One interviewed manager (age above 50) gave an important role to their sector claiming the need for its support and reform its administrative system; she said "we are the arm of the government in the medicine market in Egypt, we make balance, if we elevate our prices the whole market prices will increase, and if the private companies offer expensive drugs we offer similar ones at affordable prices for majority of citizens."

At the same time, another manager of the same age category said that privatization was always set as a possible fate for companies which fail to sustain their profits and use their resources properly but yet said that the minister can interfere to supply a product through the public sector when the private sector cuts its supply to force a raise in market price; she said, "we interfere at the time of need, for example, in 2013, a private company was a single manufacturer of a life saving drug and stopped production demanding price increase from the regulatory authority for medicines in Egypt (central administration of pharmaceutical affairs) and the government acted rapidly by giving license to one of the public pharmaceutical companies to manufacture the drug and satisfy hospital needs"

Younger employees and managers (age less than 45) did not stress much on the role of their company in realizing public benefit, for example one of them said "we are not a charity organization to supply the least prices in the market and we need to make profits or else they might privatize the company".

Chapter 5: Conclusions and recommendations

5.1 Conclusions and responses to research questions

The purpose of the study has been to investigate how participative decision making (PDM) can affect job satisfaction in a specific work setting (public and private pharmaceutical companies in Egypt). The study purpose was achieved by conducting a qualitative analysis to assess the effect of four employee-based factors and four institutional-based factors selected prior to data collection on PDM in two sample companies. Data were collected by conducting semi-structured interviews using a leading questionnaire. Collected data from the interviews were arranged, compared and discussed to explore how does each one of the eight factors assessed in this study affect PDM expression in that work setting. The comparison also came up with conclusions about strengths and weaknesses in the management system regarding the institutional-based factors assessed in this study.

Based on the detailed discussions illustrated in the previous chapter of findings & analysis, we present here proposed answers for the research questions of this study.

The first research question for this study was: Do employees and managers in the sample public and private pharmaceutical companies agree that enjoying higher PDM in their jobs will increase their job satisfaction?

In the context of this question, the study showed that nearly all interviewees from the sampled public and private companies agreed that using pathways for applying PDM such as regular meetings and written surveys asking employees to give suggestions to improve work performance- affects positively employees' satisfaction because it enhanced their creativity and self confidence, and made them accountable for their ideas and more productive.

The second research question in this study was: How can employee's years of experience, managerial level, educational level, and employee's efficiency & skills affect the degree of his/her participation in the decision-making process, which can ultimately improve employees' job satisfaction?

In the context of second question, interviewees considered efficiency and skills to be the most important factors affecting PDM in both sampled public and private companies, followed by experience (since usually efficiency comes due to experience). Educational level and managerial level were given less importance thus the study fails to conclude a direct effect for them on PDM which needs further future research. Nevertheless, the overall assessment concluded that managers should consult each employee regarding the issue he/she was skilled at, whatever the managerial and educational level, and whatever the level of efficiency and experience he/she has, since that would decrease manager's bias in taking decisions, benefit work outputs, promote PDM, and increase employees' job satisfaction.

And the third research question was: How can the incentives system, disciplinary system, promotion system, and prevalence of the principle of hard work affect employee's participation in the decision-making process, which can ultimately improve employees' job satisfaction?

Results of data analysis to the noted question showed that the managerial system that rewarded the good performers, punished the careless, encouraged the culture of hard work, and ensured balanced accountability distribution and satisfactory promotion system lead to encouraging employees' satisfaction and participation in decision-making. Recommendations to implement these ideas are given in the coming section of policy recommendations for the public company.

Finally, the fourth research question was: Which management system - the public or the private company system- is more satisfying to employees and encourages them to participate more in the decision making process?

The sampled private company enjoyed a managerial system more satisfying to the majority of employees and managers, while in the sampled public company various criticism was directed by several members from the interviewed staff to the management system regarding various issues such as equity in pay whatever performance, slow promotion system, and not getting enough chance for expressing their concerns. Especially, the young generation complained from being away from the decision-making process.

5.2 Policy recommendations for the public sector company

Analyzing the collected data in this study came up with the following policy recommendations for promoting PDM and employee job satisfaction to help public sector companies reform their administrative systems

1- Adjusting Job design and accountability distribution on all employees' levels to allow for greater employees responsibility, and avoiding concentration of decision-making in top management levels only.

2- Using job satisfaction surveys, and regular meetings with the superior management, in order to identify employees' problems and suggestions. This will give employees the voice to deliver their opinions. Also it will be useful to build trust in management, increasing employee satisfaction and lowering their intention to quit.

3- Using strategic planning for the public companies to set clear vision, mission, and objectives for each institution, and make all company departments target-oriented. This will also need the implementation of planning function and Monitoring & Evaluation function by specific departments. And it will enhance employees' participation from all departments since they will feel their opinions are listened to by the top management.

4- Adopt a more flat organizational structure to facilitate exchange of information between employees and top management, and apply a decentralized management system, where more delegation of authority is given to department heads and inside each department (this must be accompanied with a better distribution of accountability and a faster promotion system compared to the current one). Replacing old hierarchical structure with self managed teams and leveraging responsibility at the level of these self-managed teams will improve effectiveness in communication and ultimately the productivity.

5- Recommendations regarding the incentives system

Revise the incentive system to be relative to the effort and human capacities needed for each job, and specify an extra ratio of incentives to be depending on performance, this can be determined according to an appraisal system versus a preset target or key performance indicators for each job or for each work group in a certain department if their job nature needs group work. The frequency of giving the incentives ratio based on the appraisal can be every three months as applied in some private sector companies. Thus the incentives system needs to be tailored in each company and also for each department according to the nature of work, and taking into consideration the scarcity of employees with certain educational qualifications, skills and experience. This will help decrease leak of employees from the public companies to their private sector rivals and thus minimize costs of hiring and training new employees.

6- Recommendations for the disciplinary system

Revise the disciplinary system to make the penalty relative to the fault committed. Penalties used should also be in accordance with the labor law. Also the idea of investigating any public employee in front of the public prosecution should be revised since it gives a negative image when employees see their chairman and some department heads sent for interrogations without enough justification only because someone sent a complaint versus them, which happened in some cases in other public companies and they were released after that as declared by some interviewees.

Accountability system in the public company need to be revised, everyone should be accountable for his/her work after passing the initial training periods. Accountability increases as we reach higher managerial levels. So, instead of changing the chairman when company profits are not satisfactory, the management system should search for root solutions and make the necessary procedures to avoid persistence of the problem.

At the same time, penalties should be revised to make sure they do not contradict any laws. Also, the principle of equity should be stressed upon when penalizing two employees for the same fault.

7- Recommendations for promotion system:

Revise the promotion system to a faster and more dynamic one with job titles like the ones used in private sector (senior, supervisor, section head, and department manager) to reflect the actual task each one performs. The minimum years for an employee to get the first promotion to a managerial position is recommended to be lowered to 3-5 years instead of 8-14 years as the current system. Promotion system should be based on both efficiency and experience years. This will emphasize the role of hard work in getting ahead.

Any vacant position must have a clear job description and job requirements regarding experience, skills, appearance, target, etc. The management should determine who is more qualified to get this position based on all the previous considerations, and not just the seniority as in the current status.

5.3 Implications of the study findings

Findings of this study can be used in analyzing reasons for variant performances between the private and public pharmaceutical industry in Egypt. Public pharmaceutical companies and their holding company still have large assets either in terms of land, labor, established market in Egypt, and well established export markets since decades in the neighboring Arab and African countries (Business sector information center, 2016). To enable those companies continue to be competitive against the increasing number of private companies, they need to adopt recent managerial system as many of their systems,

laws and internal regulations were not changed since their establishment in the 1960s as declared by the interviewees.

Also, the other holding companies affiliated to the ministry of Public Business Sector can benefit from the recommendations of this study and start an administrative reform process after assessing their performance against their private sector rivals.

On the other hand, implications of this study do not target the public sector alone, but also the private sector pharmaceutical companies – or those from any other field- can benefit from the study recommendations to increase employees' participation in the management process and enhance their satisfaction which will lead improving their performance, increasing productivity, and decreasing turnover rate.

5.4 Limitations and suggestions for future research

The main limitation of applying results of this study on a large scale is the sample size. Although the number of interviewees from the private company was only 11 (including one production labor), but it was considered representative to the whole population of the company employees since they are about 80 employees and labors in total. So, the percentage of interviewees to the total population was 14%. This was besides the fact that interviewees came from four departments which increases reliance on the results.

Concerning the public company, although the number of interviewees was relatively larger (21 in total including three production labors), the percentage of representation was low since the whole population of the company was large (about 2,000 including 500 employees and 1,500 production labors approximately as mentioned by the interviewees). Thus, if we compare the 18 employees interviewed to the 500 employees in the company it gives a percentage of 3.6% only, and although they were distributed in four

departments but the small percentage limits generalization of the study results to the whole population.

Another limitation is the presence of many sub-categories under the category of private pharmaceutical companies, they vary a lot according to their company size, ownership style (one owner, multi owners as the private company chosen in this study), which results also in variant management systems. As illustrated by some of the private company interviewees who worked previously in other private companies; they explained their higher-level of dissatisfaction from their management styles which discouraged their participation to improve anything in the company so they had to leave. One of them said it was not an issue of private or public ownership; it was an issue of good management system that encourages people to work and participate with their opinions and efforts.

Limitations related to lack of investigating other factors affecting PDM & employee satisfaction:

There are other factors related to the work culture in Egypt not investigated in this study and may have influence on incorporating employees in the decision-making process; such as the effect of gender and whether females are equally included in PDM or not, also the institutional culture of engaging those entrusted rather than those qualified (a form of implicit corruption) as well as explicit corruption (consulting those who are within the network based on their shared interests). Further studies in the same field are thus recommended to examine the effect of these factors.

Nepotism: The study recorded a single complaint about applying nepotism in hiring employees' relatives in the public sector company, but owing to the importance of this issue it needs further research to identify to what extent nepotism affects hiring in the public company-as well as in the private company- and how it affects employees' satisfaction in their jobs. And since the predesigned questionnaire did not include questions about nepotism, and since only the last interviewee in the public company

raised this issue deliberately as a factor he considered much negatively affecting his sense of satisfaction about his company management, and due to time constraints the researcher was unable to verify this point by re-asking all interviewees to verify this point, so the researcher here would like to direct further research in the same field to include the issue of nepotism as an institutional-based factor affecting employees participation in decision making and their job satisfaction.

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Annex I

Questionnaire form for non-supervisory employees:

Date:	Company:
Name:	Department:
Age:	Managerial level:
Educational level:	Working since:

Q1 what is the degree of autonomy you have in designing &/or modifying your job tasks? (Give a grade of 1 to 5) Why did you give that grade?

Q2 To what degree are you allowed to choose your work group mates? (Give a grade of 1 to 5) Why did you give that grade?

Q3 To what degree are you allowed to submit suggestions in order to improve work performance, and to what degree they can be considered seriously to be applied by the company management? (Give a grade of 1 to 5) Why did you give that grade?

Q4 To what degree are you allowed to participate in decision making? (Give a grade of 1 to 5) Why did you give that grade?

Q5 To what degree are you allowed to demand -and have- the training programs needed to improve the performance? (Give a grade of 1 to 5)

Q6 Does the company use employee satisfaction survey to assess level of employees' satisfaction in their jobs?

Q7 To what degree are you satisfied regarding the company's management system and regarding your job nature? (Give a grade of 1 to 5) Why did you give that grade?

Q8 Do you think the superior management sets all regulations in the company or is it the personal decision of the manager that governs his/her department?

Q9 what are the pathways allowed for employees to convey their suggestions to the superior management? For e.g. meeting direct manager, superior ones, labor committee members, etc.

Q10 In your opinion, which of the following factors has to be considered by the manager when consulting his subordinate employees prior to decision making: Age (changed later to years of experience), managerial level, educational level, efficiency and skills?

Q11 Are you pleased with the incentives system? Why? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

Q12 Are you pleased with the disciplinary system and accountability distribution in your company? Why? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

Q13 Are you pleased with the promotion system in your company? Why? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

Q14 Does the principle of “hard work” exist in your company’s organizational culture? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

Q15 Does equity between employees in pay whatever their performance exist in your company? And are you pleased with it? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

Q16 Do you think that participation in decision making can increase employees’ job satisfaction? Why?

Annex II

Questionnaire form for supervisors and managers:

Date:	Company:
Name:	Department:
Age:	Managerial level:
Educational level:	Working since:

Q1 what is the degree of autonomy you give in designing &/or modifying your subordinates' job tasks? (Give a grade of 1 to 5) Why did you give that grade?

Q2 To what degree are your subordinates allowed to choose their work group mates? (Give a grade of 1 to 5) Why did you give that grade?

Q3 To what degree are your subordinates allowed to submit suggestions in order to improve work performance, and to what degree they can be considered seriously to be applied by the company management? (Give a grade of 1 to 5) Why did you give that grade?

Q4 To what degree are your subordinates allowed to participate in decision making? (Give a grade of 1 to 5) Why did you give that grade?

Q5 To what degree are your subordinates allowed to demand -and have- the training programs needed to improve the performance? (Give a grade of 1 to 5) Why did you give that grade?

Q6 Does the company use employee satisfaction survey to assess level of employees' satisfaction in their jobs?

Q7 To what degree are you satisfied regarding the company's management system and regarding your job nature? (Give a grade of 1 to 5) Why did you give that grade?

Q8 Do you think the superior management sets all regulations in the company or is it the personal decision of the manager that governs his/her department?

Q9 what are the pathways allowed for employees to convey their suggestions to the superior management? For e.g. meeting direct manager, superior ones, labor committee members, etc.

Q10 In your opinion, which of the following factors has to be considered by the manager when consulting his subordinate employees prior to decision making: Age (changed later to years of experience), managerial level, educational level, efficiency and skills?

Q11 Are you pleased with the incentives system? Why? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

Q12 Are you pleased with the disciplinary system and accountability distribution in your company? Why? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

Q13 Are you pleased with the promotion system in your company? Why? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

Q14 Does the principle of “hard work” exist in your company’s organizational culture? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

Q15 Does equity between employees in pay whatever their performance exist in your company? And are you pleased with it? Does this affect your participation with your managers by sharing more/less opinions to improve work performance?

Q16 Do you think that participation in decision making can increase employees’ job satisfaction? Why?

Annex III IRB approval letter for data collection

CASE #2015-2016-166



To: Amal Azab
Cc: Mariez Wasfi
From: Atta Gebril, Chair of the IRB
Date: May 21, 2016
Re: Approval of study

This is to inform you that I reviewed your revised research proposal entitled "Effect of using participative decision making channels on employee job satisfaction" and determined that it required consultation with the IRB under the "expedited" heading. As you are aware, the members of the IRB suggested certain revisions to the original proposal, but your new version addresses these concerns successfully. The revised proposal used appropriate procedures to minimize risks to human subjects and that adequate provision was made for confidentiality and data anonymity of participants in any published record. I believe you will also make adequate provision for obtaining informed consent of the participants.

This approval letter was issued under the assumption that you have not started data collection for your research project. Any data collected before receiving this letter could not be used since this is a violation of the IRB policy.

Please note that IRB approval does not automatically ensure approval by CAPMAS, an Egyptian government agency responsible for approving some types of off-campus research. CAPMAS issues are handled at AUC by the office of the University Counsellor, Dr. Amr Salama. The IRB is not in a position to offer any opinion on CAPMAS issues, and takes no responsibility for obtaining CAPMAS approval.

This approval is valid for only one year. In case you have not finished data collection within a year, you need to apply for an extension.

Thank you and good luck.

A handwritten signature in black ink, appearing to read 'Atta Gebril'.

Dr. Atta Gebril
IRB chair, The American University in Cairo
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Email: agebril@aucegypt.edu

A logo consisting of a yellow square on the left and a dark blue rectangle on the right.

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