

The Impact of Organizational Silence on Job Attitudes: A Study on Pharmaceutical Industry in Egypt

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Abstract

Purpose: There is little empirical evidence regarding the nature and components of OS. So, the purpose of this research is to identify the impact of Organizational Silence (OS) on Job Attitudes (JA) at the pharmaceutical industry in Egypt.

Design/methodology/approach: To assess OS, refer to (OS questionnaire, Schechtman, 2008; Brinsfield, 2009), JS (JS questionnaire, Judge et al., 2001; Best & Thurston, 2004) and OC (OC questionnaire, Allan & Meyer, 1990; Meyer, et. al., 1993). Five dimensions of OS are constructed and measured in order to examine their effects on JA at the pharmaceutical industry in Egypt. Out of the 356 questionnaires that were distributed to employees, 315 usable questionnaires were returned, a response rate of 88%. Multiple Regression Analysis (MRA) was used to confirm the research hypotheses.

Findings: Results indicate that supervisors' attitudes to silence, top management attitudes to silence and communication opportunities are associated and predict employee silence behaviour. The research has found that there is a significant relationship between OS and JA. Also, the research has found that OS directly affects JA at the pharmaceutical industry in Egypt.

Practical implications: This research pointed to the need for organizations to adopt a culture which encourages and urges employees to speak in the labor issues and the non-silence in order for the administration to be able to realize these issues and try to solve them first hand in order to prevent their aggravation.

Originality/value: There is little empirical evidence in the literature aimed at defining, analyzing, and coping with silence. It has an impact on the ability of organizations to detect errors. Therefore, this research aims to measure the effect of OS on JA. Based on the findings of this research, some important implications are discussed.

Keywords: organizational silence, job attitudes

1. Introduction

Organizational Silence (OS) is a phenomenon that requires knowledge of the researches on "voice and silence in organizations". Three periods of research on sound and silence will be reviewed. First period (from 1970s until 1980s middle): in this decade, the main focus of researches was on the concept of sound. Second period (from 1980s middle until 2000): the main focus of researches was on "Speaking Up". However, few attentions was paid to the silence behaviour during this decade. Current period (from 2000 to now) in which main focus is on the silence concept (Greenberg & Edwards, 2009).

The negative effects of silence may be direct or indirect. Silence directly affects the performance of the business because of the lack of flow of the important information to the top administrative levels, which reduces the chances of renewal and development in the workplace. On the other hand, it can indirectly affect the employees of an organization, as the employees who tend to silence may suffer from tensions and some mental or psychological problems (Tangirala & Ramanujam, 2008).

Modern managerial approach has been offering plenty of chances for information flow and communication in the form of evaluation meetings, suggestion, complaint mechanisms, face-to-face meetings, and open-door policies within the organization. But having some fears such as being labeled as a potential complainant, losing colleagues' trust and respect, exposure to the loss of the relationship with the institution, losing the job, or risking promotion constrain the flow of information and communication between employees and top executives. Thus, employees choose to remain silent (Cakici, 2010).

OS, Job Satisfaction (JS), and Organizational Commitment (OC) are very important subjects for organizations to reach the desired objectives. This research focuses on the relationship between OS and JA. It is structured as follows: Section one is introductory. Section two presents the literature review. Section three discusses the research methodology. Section four presents the hypotheses testing. Section five explains the research findings. Research recommendations will take place at section six. Section seven handles the research implications. Limitations and future research will take place at section eight. Conclusion will be provided at the last section.

2. Literature Review

2.1. Silence

Hirschman defined voice as 'any attempt at all to change', and he suggested that it becomes a better way of preventing decay in organizational performance (Gambarotto et al., 2010).

Silence is important to understand, not only because it has the potential to undermine the reporting of unethical and illegal practices, but also because it obstructs the effective organizational learning. This constitutes a barrier to organizational change and development and suppresses pluralism, hence innovation and creativity (Morrison & Milliken, 2000; Milliken & Morrison, 2003).

Silence adversely affects OC and JS, as there is an inverse relationship between employee silence and JS. This is because silence leads to a negative impact on the satisfaction of the employees and their commitment to the organization (Vakola & Bouradas, 2005).

Silence climate in organizations can be as opposed to desirable outputs like JS and OC (Aylsworth, 2008).

Silence is an employee's 'motivation to withhold or express ideas, information and opinions about work-related improvements' (Donaghey, et al. 2011).

2.2. Types of Silence

There are four types of silence. They are acquiescent silence, defensive silence, prosocial silence, and protective silence (Pinder & Harlos 2001; Van Dyne, et al., 2003; Briensfield 2009; Perlow & Repeing; 2009; Cakici 2010; Alparslan 2010; Bogosian, 2012).

2.2.1. Acquiescent Silence

The first form of silence is AS. It relates to occasions where employees chose not to express relevant ideas, information and opinions based on resignation which suggests disengaged behaviour (Kahn 1990).

AS is synonymous with employees who are essentially disengaged and are unwilling to take steps to enact change (Pinder & Harlos, 2001).

AS is withholding relevant ideas, information, or opinions, based on resignation. AS suggests disengaged behavior that is more passive than active (Pinder & Harlos, 2001; Van Dyne, et al. 2003).

AS is the withholding of information, views, opinions and ideas in the face of developments in the organizations. AS is a passive behavior. In the case of AS, employees approve the status quo, do not want to speak up much, and do not attempt to change the organizational circumstances. This attitude requires remaining silent purposefully and not being involved in developments. The reason that lies behind employees' failure to speak out is the belief that it will not make a difference even if they do speak out (Karacaoglu & Cingoz, 2008).

2.2.2. Defensive Silence

DS is based on an employee's personal fear of speaking up. This can be termed as quiescent silence (Pinder & Harlos, 2001).

DS differs from the previous form in that DS involves the individual weighing up the alternatives and making a conscious choice to withhold ideas information and opinions as the safest option for the individual at that point in time. DS is intentional and proactive behavior that is intended to protect the self from external threats. In contrast to AS, DS is more proactive, involving awareness and consideration of alternatives, followed by a conscious decision to withhold ideas, information, and opinions as the best personal strategy at the moment (Van Dyne, et al. 2003).

DS is a proactive and conscious behavior with the urge of self-protection against external threats (Karacaoglu & Cingoz, 2008).

2.2.3. Pro Social Silence

Pro-Social silence as intentional and proactive behaviour that is primarily focused on others. Pro Social silence involves conscious decision making by an employee, Pro Social silence arises from a concern for others instead of fear of negative personal consequences (Korsgaard et al., 1997).

Pro-Social silence is the refusal to express ideas information or opinions so that others in the organization might benefit from it. This silence is motivated by the desire to help others and share the duties. It is considerate and focuses on others (Podkasoff et al., 2000).

Like Organizational Citizenship Behavior (OCB), Pro-social silence is intentional and proactive behavior that is primarily focused on others. Like OCB, Pro-social silence is discretionary behavior that can not be mandated by an organization. DS, Pro-social silence is based on awareness and consideration of alternatives and the conscious decision to withhold ideas, information, and opinions. In contrast to DS, Pro-social silence is motivated by concern for others, rather than by fear of negative personal consequences that might occur from speaking up (Van Dyne, et al. 2003).

Pro social Silence is "withholding work-related ideas, information, or opinions with the goal of benefiting other people or the organization-based on altruism or cooperative motives." This form of silence is intentional, proactive and other-oriented. In other words, primary priority of an employee who decides to remain silent is not himself but the external factors such as the organization or his colleagues (Van Dyne et.al., 2003).

2.2.4. Protective Silence

Protective silence is where employees can be silent and accept decisions of higher level management. One of the most important causes of silence is the good relationship between the organization and employees. Therefore, employees prefer to be silent instead of telling what is wrong in their organizations. For that reason silent employees never share their opinion to solve conflict in the organization (Morrison & Milliken, 2003; Perlow & Repenning, 2009, Alparslan 2010).

2.3. Organizational Silence

When most of employees prefer to keep silence about organizational matters, silence becomes a collective behavior that is called OS (Henriksen & Dayton, 2006).

There are two important differentiating characteristics of OS. First, OS is focused on collective-level dynamics. Second, OS was on why employees intentionally choose to remain silent, rather than on why they do not choose to speak-up. OS is the hard choice made by employees within some organizations to keep their thoughts and opinions quiet and shut themselves away from company decisions (Morrison & Milliken, 2000).

OS means that the employee withholds his opinions and suggestions about the work of the organization problems (Pinder & Harlos, 2001).

OS means the presence of a common perception among employees limiting their participation in providing their knowledge about the issues and policies of the organization (Nennete, 2002).

OS is a reflection of the forces affecting the relationships between individuals and groups and regulations governing these relationships which prevent staff of talking about the organization's problems (Avan et al, 2003).

OS is the common choice made by organization members despite all research extolling the virtues of upward information for organizational health (Glauser, 1984; Deming, 1986; Argyris & Schon, 1978; Rodriguez 2004).

OS may cause labour turnover, lack of motivations and a tendency towards low endeavor for reaching organizational aims. OS refers to the employee's failure to participate views and suggestions on important labor issues and choosing to remain silent (Vakola & Bouradas, 2005).

OS refers to the collective-level phenomenon of doing or saying very little in response to significant problems or issues facing an organization or industry because of negative reactions (Henriksen & Dayton, 2006). OS is a variable which can prevail about barriers to effectiveness, commitment and performance (Beer 2009).

OS can negatively affect the harvesting of institutional knowledge, evolution, and development. The possibility of being excluding when speaking up may cause employees to stop communicating and giving feedback to their supervisors. Combined with a failure to intellectually support employees will lead to ineffective organizational decisions (Kahveci, 2010).

OS can be beneficial in some cases, these are: decrease of administrative information overload, reducing interpersonal conflicts and storage of secret information. Despite these, OS is rather regarded as a harmful phenomenon for both the employee and the organization (Tikici et al., 2011).

OS occurs when employees intentionally withhold their knowledge and ideas regarding organizational issues. Many organizations have been involved in solving a major puzzle and that is most

people know the fact about certain problems of organization but do not have the courage to express those facts to their supervisors (Tulubas & Celep, 2012).

2.4. Organizational Silence Factors

There are multiple views about the factors leading to OS (Schechtman, 2008), because of its many different determinants or causes, as follows: (1) support of the top management of silence, (2) lack of communication opportunities, (3) support of supervisor for silence, (4) official authority, and (5) the subordinate's fear of negative reactions (Brinsfield, 2009).

2.4.1. Support of the Top Management of Silence

The role of top management is instrumental in the success of the business organizations. The availability of a high degree of confidence in the administration reduces concerns of speaking freely about the problems and issues of labor. Climate of confidence in the top management reduces the feelings of uncertainty (Weber & Weber, 2001).

On the other hand, the attitudes and values of the top management may contribute greatly to the formation of a climate of silence, as some organizations prohibit employees from saying what they know or feel (Argyris, 1997).

The top management practices may lead to increased levels of silence within the organization. These practices are represented in two factors (Morrission & Milliken, 2000):

2.4.1.1. Managers' Fear of Negative Feedback

The top management may be afraid of getting negative feedback information from the subordinates, as it may feel threatened as a result of this information, particularly, if they involve its members personally or their work. Because of that, those members would eschew this information, and even if it reached them they would neglect it or question the credibility of the source, believing that the feedback from the bottom may be less accurate and less legitimate (Vakola & Bouradas, 2005).

2.4.1.2. Managers' Implicit Beliefs

Silence increases when the top management is in an ivory tower prohibiting it from seeing the actual reality because of lack of access to information, or due to welcoming the good information rather than the negative (Van, Dyne, et al, 2003).

Thus, the support of top management of silence leads employees not to talk about work issues. Besides, the administration may describe employees who talk about labor issues as problem makers (Milliken, et al., 2003).

2.4.2. Lack of Communication Opportunities

Contact is essential to the effectiveness of any organization. It represents the transfer of information verbally or using other means for the purpose of persuasion and influencing the behavior of others. Among the most important functions of the communication process is that it provides individuals with the necessary information for the purpose of decision-making, as it represents an outlet to express feelings, opinions and trends. It is an important means to satisfy social needs of individuals (Robbins & Judge, 2011).

The more contact opportunities within the organization, the greater participation and expression of opinion on issues and problems of the work, as employees have the opportunity to make suggestions, which increase the degree of career belonging and involvement of employees (Smidts, et al., 2001).

2.4.3. Support of Supervisor for Silence

The supervisor's behavior creates a microcosm climate of silence at the level of the department where he works, where subordinates do not trust that supervisors will not directly or indirectly punish them because of their talk on their mistakes in the work. Therefore, subordinates tend to silence (Spreitzer, 1996; Sugarman, 2001).

The subordinates' silence is influenced by trends and tendencies of the supervisors to silence rather than trends and tendencies of top management. Therefore, when the supervisor listens to his subordinates,

they will consider him a role model, and tend to involve themselves in labor issues and talk about it. This is because the supervisory relations have a tremendous impact on the performance and career paths of subordinates as well as on rewards from the organization (Sparrowe & Liden, 2005).

The relationship of supervisor's strength and stature to silence or talking can be analyzed in two ways: on the one hand, the subordinate may tend to talk more than keep silence with a strong supervisor, because this subordinate believes that the supervisor has the ability to resolve any problem or issue related to work. Here, a subordinate finds it useful to talk in the presence of a supervisor who has the powers to solve work problems within the organization (Morrison & Milliken, 2000).

On the other hand, the freedom to express dissenting opinion may be restricted when working under the leadership of a supervisor with prestige and power, because the subordinate tends to the option of silence due to fear of the negative impact of expressing the dissent opinion (Turner & Pratkanis, 1998).

In spite of that, power and status of the supervisor can increase or decrease the silence of subordinates, but many researchers assert that subordinates are more sensitive to the risks of talking more than the benefits, in the presence of a strong supervisor. It can be concluded that silence could increase in the presence of a powerful supervisor (Edmondson, 1996).

2.4.4. Official Authority

Officialdom is the degree by which the activities carried out by employees are formed within the organization, through the adoption of several measures (Moorhead & Criffin, 2004).

Officialdom is based on the strength of the position or location in the organizational structure. Dealing follows specific orders and a bureaucrat approach through decision-making centralization, and the use of regulations to deal with the problems and issues of work. At this point, the organization lacks an effective mechanism for information feedback. This is because there are few upwards communication channels because heads believe that the views of the subordinates are unimportant and therefore tend to silence (Ashford et al., 1998).

2.4.5. Subordinate Fear of Negative Reactions

The fear of the reaction may lead employees to believe that talking about work problems might deprive them of their jobs or upgrade to higher positions within the organization (Milliken, et al, 2003).

2.5. Organizational Silence Effects

There are several implications of OS, as silence is of a significant impact on individuals and the organization (Bogosian, 2012).

OS can lead to several consequences on organizations and employees. Employees believe that they are to be punished openly or discreetly when they express their opinions about organizational issues and faults. Therefore, they avoid expressing their opinions and remain silent about organizational progress. OS not only slows down organizational development but also cause several consequences such as decreasing in employees' commitment levels, causing interior conflicts, reducing decision making process, blocking change and innovation, preventing positive or negative feedbacks to the management. OS cause an increase of behaviours such as breaking down of morale and motivations of employees, absenteeism, tardiness and releases which negatively affect individual and organizational activities (Morrison & Milliken, 2000).

There are negative impacts of OS, namely (1) poor participation of employees in decision-making because of the lack of the channels or opportunities of communication, (2) reducing dealing with conflict or dispute in an effective manner, and (3) weakness of the employees' capacity to learning and self-development (Low et al ., 2002).

OS does have implications and consequences on the climate of trust within the organization, because it leads to poor relations of trust between employees due to lack of dialogue between them (Willman et al., 2006).

OS leads to poor organizational learning, arguing that employees failed to talk with their superiors about the problems of work, which is often a constraint for organizational learning, because silence prevents the organization from correcting mistakes or learning from them. There is also a relationship between OS

and job withdrawal, as employee's preference of silence to talking is a matter of time before making the decision of withdraw or leave (Brinsfield, 2009).

OS correlates negatively with three dimensions of organizational trust (trust in the organization, trust in leadership, trust in the supervisor). This means that the more silence means less trust (Nikolaou, et al., 2011).

2.6. Job Attitudes

2.6.1. Job Satisfaction

JS has been one of the most widely studied concepts in management literature (Wilson, 1996).

JS refers to an employee's general attitude toward his or her job. An individual who is satisfied with his or her job holds positive attitude toward the job (Robbins, 2000). JS is a positive (or negative) evaluative judgment one makes about one's job or job situation (Weis, 2002).

JS is multidimensional, a worker may variably be satisfied with job, supervisor, pay, and workplace. A number of elements makes up JS, including salary, clarity of job responsibilities, relationship with colleagues inside and outside one's unit and organization, organizational climate, career development, opportunities for advancement, and general perceptions of work environment (Rosser, 2004).

JS is a positive emotional reaction to a particular job (Oshagbemi, 2003). It is not a unitary concept. An employee can be relatively satisfied with one aspect of job and dissatisfied with one or more other aspects (Kreitner & Kinicki, 2004).

JS impacts both individuals and organizations. On the individual level, JS impacts stress (Zeytinoglu et al. 2007; Lambert, et al., 2007), and burnout (Oncel, et al., 2007). On the organizational level, however, JS impacts empowerment (Hechanova, et al., 2006), customer satisfaction (Homburg & Stock, 2004), service quality and performance (Park & Deitz, 2006), and OC (Al-Ajmi, 2006).

JS is explained as the feelings a worker has about his or her job experiences related to previous experiences, current expectations, or available alternatives (Zarea, et al., 2009).

It is the amount of pleasure an employee has with the job (Dendaas, 2004), and can differ from employee to employee (Farsi, et al., 2010).

There are two dimensions of JS. They are internal satisfaction and external satisfaction (Judge et al., 2001; Best & Thurston, 2004):

- **Internal Satisfaction:** the opportunities to demonstrate abilities, sense of achievement obtained from work, ethical values of the work and opportunities to provide services.
- **External Satisfaction:** job content, salary, unobstructed channels for promotion, work environment and equipment.

2.6.2. Organizational Commitment

OC is defined as a profound belief on organizational aims and values and propensity to do a remarkable attempt for organization and a powerful demand for the continuance of membership in the organization (Salami, 2008).

OC is the basis of commitment of an individual to the organization and empowering the relation between individual and the organization. OC should be characterized by three factors; (1) strong belief and acceptance of the organization's purpose and values, (2) making voluntarily an effort for the organization's interests and (3) show sustainability as a member of the organizations (Porter, et al., 1974).

OC is an attitude or tendency of connection between individuals and their organization (Mowday, et al., 1982).

OC can be summed up as the totality of normative pressures to act in a way which means organizational goals and interests (Weiner, 1982).

The reasons on studying OC relate to: (1) employees' behavior and performance efficiency, (2) attitude, affection and cognition paradigms such as JS, (3) job traits and employees' role such as accountability and (4) personal traits such as age and proficiency (Bateman & Asser, 1984).

There are various factors which play role in increasing or decreasing on OC. They are (1) an individual expresses more on OC when he/she possesses higher level of responsibility and independence in his/her job (2) when it is possible to find a better job, the ideality of such alternatives cause lower personal commitment, (3) older and more experienced employees and those who are satisfied with their performance

tend to be higher on OC levels than others, (4) those individuals who are satisfied with their supervisors and the equality in assessing their performance and feel that organization pays more attention to their amenities enjoy higher OC, (5) more employees' contribution in decision-making, more on OC (Greenberg & Baron, 1990).

OC can appear from an obligation, a desire or a need for continuing organizational membership (Meyer & Allen, 1991).

OC describes the attitude and behaviour of an employee towards an organization goal. OC explains employees psychological and emotional attachment to their workplaces (Meyer & Allen, 1991; Meyer et al., 1993).

OC happens in a mutual exchange process between individual and the organization. Individuals expect rewards in return of self-commitment to the organization (Balci, 2003).

OC is the willingness of social actors to give their energy and loyalty to social systems (Klinsontorn, 2005).

Individuals with high OC show three characteristics: (1) they accept organizational aims and values in high levels, (2) they seriously tend to attempt achieving organizational goals and (3) they are highly interested in staying and continuing their work in the organization (Vakola, & Bouradas, 2005).

OC can be described as a force that binds an individual to a course of action that is of relevance to a particular goal (Shahnawaz & Juyal, 2006).

OC is an important attitude in assessing employees' intention to quit and the overall contribution of the employee to the organization (Shirbagi, 2007).

There are two insights on OC. The first one considers commitment as an affective issue or view. According to this theory, people recognize their identity through organization and are committed to retain their OC in order to pursue their aims. In the second attitude, it is believed that commitment is a behavioral issue. According to it, individuals have powerful commitment to the organization in certain conditions. On this basis, individuals stay in the organization and get committed to it due to their investments (Ugboro, 2006).

OC is a psychological concept reflecting the relationship between the employees and the organization (Wei & Tai, 2010).

Three different commitment types are identified. These are; affective commitment, continuance commitment and normative commitment (Allen & Mayer, 1990; 1991; Dunham et al., 1994; Meyer & Allen, 1997; Salim, et al., 2008).

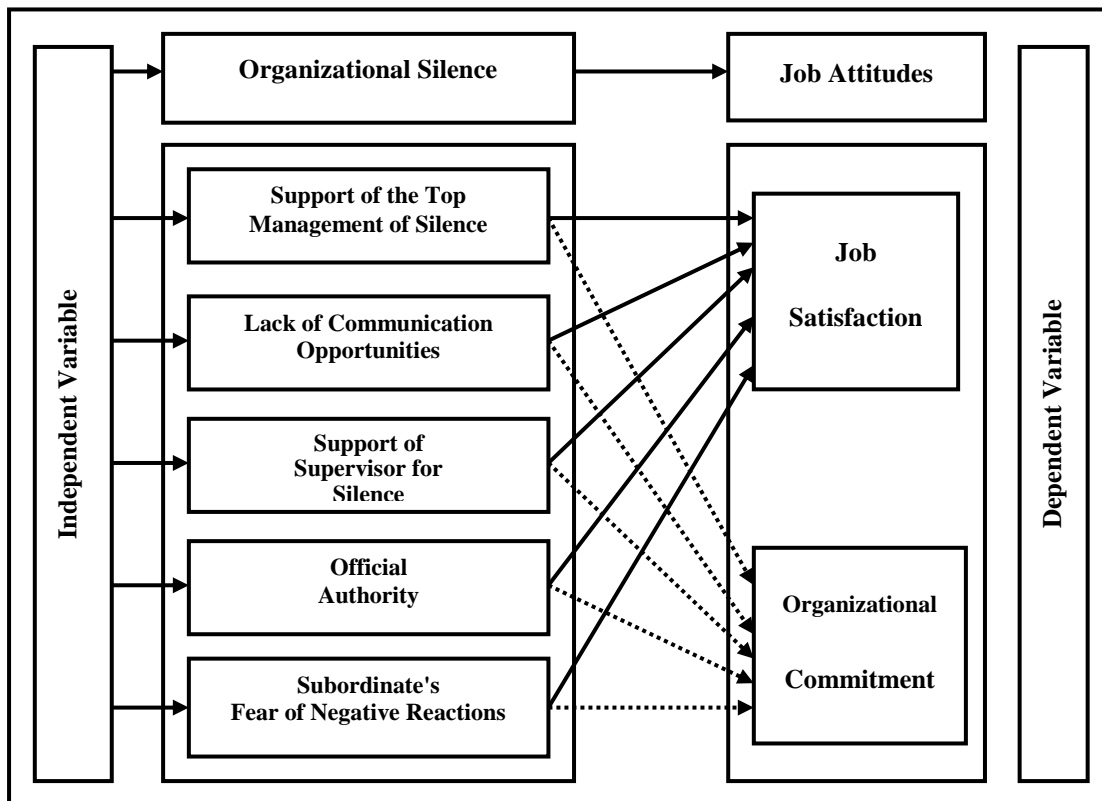
- **Affective Commitment:** Affective Commitment (AC) is the emotional attachment of an employee to, identification with and involvement in the organization. AC is an emotional attitude where individuals are in communication with the organization and are happy to be a part of it by identifying themselves with their organization. AC expresses employees' AC to and identification with their organization. This dimension expresses employees' desire for staying in the organization and their emotional commitment to the organization.
- **Continuance Commitment:** Continuance Commitment (CC) is based on the employee's perceived cost of leaving the organization or on a perceived lack of alternative employment opportunities. CC is the situation of continuing organization membership with the thought that if they quit, its costs will be too high. At the same time, CC occurs when there is no alternative CC is a commitment element that expresses the awareness of employees' that if they quit the organizations, they will pay for it. CC describes employee's evaluation of whether the cost of leaving the organization outweighs the cost of staying. Those who believe the cost of leaving the organization is greater than the cost of staying remain because they need to.
- **Normative Commitment:** Normative Commitment (NC) deals with an employee's feeling of obligation to stay with the organization. The employee stays with an organization out of a perceived obligation to the company which may arise from a variety of causes. NC contains obligation element. However, obligation here is more different than CC. Obligation takes shape within the frame of ethical feelings, not personal cost calculation. NC emphasizes employees' tendency of commitment and loyalty to the organization since they are socialized in a culture that promotes self-commitment and loyalty.

3. Methodology

3.1. Research Model

The proposed comprehensive conceptual model is presented in Figure (1). The diagram below shows that there is one independent variable of OS. There are two dependent variables of JS and OC. It shows the rational links among the variables. The research model is as shown in the following figure.

Figure (1)
Proposed Comprehensive Conceptual Model



The research framework suggests that OS has an impact on JS and OC. OS as measured consisted of support of the top management of silence, lack of communication opportunities, support of supervisor for silence, official authority, and subordinate's fear of negative reactions (Schechtman, 2008; Brinsfield, 2009).

JS is measured in terms of the internal satisfaction and external satisfaction (Judge et al., 2001; Best & Thurston, 2004).

OC is measured in terms of affective commitment, continuance commitment and normative commitment (Allan & Meyer, 1990; Meyer, et. al., 1993).

3.2. Research Questions and Hypotheses

The researcher found the research problem through two sources. The first source is to be found in previous studies, and it turns out that there is a lack in the number of literature reviews that dealt with the analysis of the relationship between OS, JS and OC. This called for the researcher to test this relationship in the Egyptian environment. The second source is the pilot study, which was conducted in an interview with (30) employees in order to identify the relationship between OS, JS and OC. The researcher found several indicators; notably the important and vital role that could be played by OS.

As a result of the discussions given above, the research questions are as follows:

Q1: What is the nature and extent of the relationship between OS (support of the top management of silence) and JS at the pharmaceutical industry in Egypt.

Q2: What is the nature of the relationship between OS (lack of communication opportunities) and JS at the pharmaceutical industry in Egypt.

- Q3: What is the statistically significant relationship between OS (support of supervisor for silence) and JS at the pharmaceutical industry in Egypt.
- Q4: What is the nature and extent of the relationship between OS (official authority) and JS at the pharmaceutical industry in Egypt.
- Q5: What is the nature of the relationship between OS (subordinate's fear of negative reactions) and JS at the pharmaceutical industry in Egypt.
- Q6: What is the nature and extent of the relationship between OS (support of the top management of silence) and OC at the pharmaceutical industry in Egypt.
- Q7: What is the nature of the relationship between OS (lack of communication opportunities) and OC at the pharmaceutical industry in Egypt.
- Q8: What is the statistically significant relationship between OS (support of supervisor for silence) and OC at the pharmaceutical industry in Egypt.
- Q9: What is the nature and extent of the relationship between OS (official authority) and OC at pharmaceutical industry in Egypt.
- Q10: What is the nature of the relationship between OS (subordinate's fear of negative reactions) and OC at the pharmaceutical industry in Egypt.

There are studies in literature that study OS, JS and OC factors separately and within the frame of bilateral relation, there is no study that examines these factors collectively at the Egyptian environment. This study aims to contribute to the literature by examining the research variables collectively and revealing the interaction between the research variables. As a result of the discussions given above, the following hypotheses were developed to test the effect of OS on JS and OC at the pharmaceutical industry in Egypt.

- H1: OS (support of the top management of silence) of employees has no statistically significant effect on JS at the pharmaceutical industry in Egypt.
- H2: OS (lack of communication opportunities) of employees has no statistically significant impact on JS at the pharmaceutical industry in Egypt.
- H3: OS (support of supervisor for silence) of employees has no statistically significant influence on JS at the pharmaceutical industry in Egypt.
- H4: OS (official authority) of employees has no statistically significant effect on JS at the pharmaceutical industry in Egypt.
- H5: OS (subordinate's fear of negative reactions) of employees has no statistically significant impact on JS at the pharmaceutical industry in Egypt.
- H6: OS (support of the top management of silence) of employees has no statistically significant effect on OC at the pharmaceutical industry in Egypt.
- H7: OS (lack of communication opportunities) of employees has no statistically significant impact on OC at the pharmaceutical industry in Egypt.
- H8: OS (support of supervisor for silence) of employees has no statistically significant influence on OC at the pharmaceutical industry in Egypt.
- H9: OS (official authority) of employees has no statistically significant effect on OC at the pharmaceutical industry in Egypt.
- H10: OS (subordinate's fear of negative reactions) of employees has no statistically significant impact on OC at the pharmaceutical industry in Egypt.

3.3. Population and Sample

The population of the study included all employees at the pharmaceutical industry in Egypt. This sector includes five companies. They are Delta for the pharmaceutical industry, Egyptian International Pharmaceutical Industries (Eipico), Pharma Sweden, Egypt Otsu, and Egyptian Chemicals and drugs. This explains why the population of this study includes 4,783 employees. The random sampling was used for collecting the primary data as it was difficult to get all of the items of the research population because of time limitations. The stratified random sample was used while selecting items from the different categories of employees. The following equation determines the sampling size (Daniel, 1999):

$$n = \frac{N \times (Z)^2 \times P(1-P)}{d^2 (N-1) + (Z)^2 \times P(1-P)}$$

Accordingly, the sample size has become 356 employees at the pharmaceutical industry in Egypt.

Table (1) Distribution of the Sample Size

Egyptian Pharmaceutical Companies	Employees	Percentage	Sample Size
1. Delta for the Pharmaceutical Industry	1500	31.4%	356X 31.4%= 112
2. Egyptian International Pharmaceutical Industries (Eipico)	1833	38.3%	356X 38.3% = 136
3. Pharma Sweden	850	17.8%	356 17.8% = 63
4. Egypt Otsu	350	7.3%	356X 7.3% = 26
5. Egyptian Chemicals and drugs	250	5.2%	356X 5.2% = 19
Total	4783	100%	356X 100% = 356

Source: Personnel Department at Pharmaceutical Industry in Egypt, 2015

Descriptive statistics are used to describe some of the features of the respondents at the pharmaceutical industry in Egypt who participated in the survey. Table (2) provides more detailed information about the sample and the measures.

Table (2) Characteristics of Items of the Sample

Variables		Number	Percentage
1- Job Title	Physicians	130	41.3%
	Nurses	154	48.9%
	Administrative Staff	31	9.8%
	Total	315	100%
2- Sex	Male	120	38.1%
	Female	195	61.9%
	Total	315	100%
3- Marital Status	Single	99	31.4%
	Married	216	68.6%
	Total	315	100%
4- Age	Under 30	128	40.6%
	From 30 to 45	121	38.4%
	Above 45	66	21.0%
	Total	315	100%
5- Educational Level	Secondary school	103	32.7%
	University	153	48.6%
	Post Graduate	59	18.7%
	Total	315	100%
6- Period of Experience	Less than 5 years	103	32.7%
	From 5 to 10	77	24.4%
	More than 10	135	42.9%
	Total	315	100%

3.4. Procedure

The goal of this study was to identify the relationship between OS, JS and OC at the pharmaceutical industry in Egypt. A survey research method was used to collect data. The questionnaire included four questions, relating to OS, JS and OC, and demographic information of employees at the pharmaceutical industry in Egypt. Data collection took two months. Survey responses were 88%, 315 completed surveys out of the 356 distributed.

3.5. Data Collection Tools

3.5.1. Organizational Silence Scale

The researcher will depend on the scale developed by Schechtman, 2008; and Brinsfield, 2009 in measuring OS, which has been divided into five elements (support of the top management of silence, lack of communication opportunities, support of supervisor for silence, official authority, and subordinate's fear of negative reactions).

The 27-item scale OS section is based on Schechtman, 2008; and Brinsfield, 2009. There were five items measuring support of the top management of silence, six items measuring lack of communication opportunities, five items measuring support of supervisor for silence, five items measuring official authority, and six items measuring subordinate's fear of negative reactions. The survey form is used as the main tool for data collection in measuring OS at the pharmaceutical industry in Egypt.

Responses are categorized using a 5-point Likert Scale for each statement, ranging from (1) “very ineffective”, (2) “ineffective”, (3) “neither effective nor ineffective”, (4) “effective”, and (5) “very effective”.

3.5.2. Job Satisfaction Scale

The researcher will depend on the scale developed by (Judge et al., 2001; and Best & Thurston, 2004), in measuring JS, which has been divided into two main components (internal satisfaction and external satisfaction). There were five items measuring internal satisfaction and five items measuring external satisfaction. JS has been measured by the five- item scale of Likert of agreement or disagreement where each statement has five options. The informant should select the answer that suits his choice, where (5) indicates full agreement while (1) indicates full disagreement, with neutral degrees in- between.

3.5.3. Organizational Commitment Scale

The researcher will depend on the scale developed by (Allan & Meyer, 1990; Meyer, et. al., 1993), in measuring OC, which has been divided into three main components (affective commitment, continuance commitment, and normative commitment). There were six items measuring affective commitment, six items measuring continuance commitment, and six items measuring normative commitment.

Responses to all items scales were anchored on a five (5) point Likert scale for each statement ranging from (5) “full agreement,” (4) for “agree,” (3) for “neutral,” (2) for “disagree,” and (1) for “full disagreement.”

3.6. Data Analysis

The researcher has employed the following methods: (1) Cronbach's alpha or ACC, (2) (MRA), and (3) F- test and T-test. All these tests are found in SPSS.

4. Hypotheses Testing

4.1. Evaluating Reliability

Before testing the hypotheses and research questions, the reliability of OS and JA were assessed to reduce errors of measuring and maximizing constancy of these scales. To assess the reliability of the data, Cronbach's alpha test was conducted.

Table (3) shows the reliability results for OS and JA. All items had alphas above 0.70 and were, therefore, excellent, according to Langdrige's (2004) criteria.

Regarding Table (3), the 27 items of OS are reliable because the ACC is 0.9846. Support of the top management of silence, which consists of 5 items, is reliable because the ACC is 0.9530. Lack of communication opportunities, which consists of 6 items, is reliable because the ACC is 0.9392. Furthermore, support of supervisor for silence which consists of 5 items, is reliable because the ACC is 0.9046. Official authority, which consists of 5 items, is reliable because the ACC is 0.8814. Subordinate's fear of negative reactions, which consists of 6 items, is reliable because the ACC is 0.9060. Thus, the internal consistency of OS can be acceptable.

Table (3) Reliability of OS, JS, and OC

Variables	The Dimension	Number of Statement	ACC
OS	Support of the top Management of Silence	5	0.9530
	Lack of Communication Opportunities	6	0.9392
	Support of Supervisor for Silence	5	0.9046
	Official Authority	5	0.8814
	Subordinate's Fear of Negative Reactions	6	0.9060
	Total Measurement	27	0.9846
JS	Internal Satisfaction	5	0.9153
	External Satisfaction	5	0.6589
	Total Measurement	10	0.8854
OC	Affective Commitment	6	0.9833
	Continuance Commitment	6	0.9796
	Normative Commitment	6	0.9406
	Total Measurement	18	0.9801

According to Table (3), the 10 items of JS are reliable because the ACC is 0.8854. The internal satisfaction, which consists of 5 items, is reliable because the ACC is 0.9153. The 5 items related to external satisfaction are reliable because ACC is 0.6589. Thus, the reliability of JS can be acceptable.

Regarding Table (3), the 18 items of OC are reliable because the ACC is 0.9801. Affective commitment, which consists of 6 items, is reliable because the ACC is 0.9833. Continuance commitment, which consists of 6 items, is reliable because the ACC is 0.9796. Furthermore, normative commitment, which consists of 6 items, is reliable because the ACC is 0.9406. Thus, the internal consistency of OC can be acceptable.

Accordingly, three scales were defined, OS (27 variables), where ACC represented about 0.9846, JS (10 variables), where ACC represented 0.8854, and OC (18 variables), where ACC represented 0.9801.

4.2. Correlation Analysis

The researcher calculated means and standard deviations for each variable and created a correlation matrix of all variables used in hypothesis testing. Arithmetic mean and standard deviation values related to dependent and independent variables of this study and correlation coefficients between these variables are given in Table (4).

Table (4) Descriptive Statistics and Correlation Matrix of Constructs

Variables	Mean	Std. Deviation	1	2	3	4	5	6	7
1. Support of the top management of silence	3.36	0.945	1						
2. Lack of communication opportunities	3.36	0.945	0.972**	1					
3. Support of Supervisor for silence	3.36	0.945	0.967**	0.946**	1				
4. Official Authority	3.36	0.945	0.978**	0.960**	0.966**	1			
5. Subordinate's fear of negative reactions	3.36	0.945	0.974**	0.974**	0.942**	0.949**	1		
6. Job Satisfaction	3.36	0.945	0.304**	0.312**	0.310**	0.353**	0.277**	1	
7. Organizational Commitment	3.36	0.945	0.507**	0.505**	0.496**	0.543**	0.484**	0.626**	1

Note: ** Correlation is significant at 0.01 level.

According to Table (4), the reasons of the employees remaining silent was generated according to the respondents' answers. Reasons were grouped under five factors. They are (1) support of the top management

of silence, (2) lack of communication opportunities, (3) support of supervisor for silence, (4) official authority, and (5) subordinate fear of negative reactions.

Based on Table (4), the first issue examined was the different facets of OS. Among the various facets of OS, those who responded identified the presence of a official authority (M=3.49, SD=0.824). This was followed by lack of communication opportunities (M=3.46, SD=0.888), support of supervisor for silence (M=3.41, SD=0.879), support of the top management of silence (M=3.36, SD=0.945), and subordinate fear of negative reactions (M=3.35, SD=0.855).

The second issue examined was the different facets of JS (internal satisfaction and external satisfaction). Most of the respondents identified the overall JS (M=3.18, SD=0.939).

The third issue examined was the different facets of OC. Among the various facets of OS, those who responded identified the overall OC (M=3.84, SD=0.797).

According to Table (4), OS dimensions have negative and significant relation with JS dimensions. The correlation between OS (support of the top management of silence) and JS is 0.304. As for OS (lack of communication opportunities) and JS, the value is 0.312 whereas OS (support of supervisor for silence) and JS show correlation value of 0.310. For OS (official authority) and JS, the value is 0.353 whereas OS (subordinate's fear of negative reactions) and JS show correlation value of 0.277.

Regarding Table (4), OS dimensions have negative and significant relation with OC dimensions. The correlation between OS (support of the top management of silence) and OC is 0.507. For OS (lack of communication opportunities) and OC, the value is 0.505 whereas OS (support of supervisor for silence) and OC show correlation value of 0.486. For OS (official authority) and OC, the value is 0.543 whereas OS (subordinate's fear of negative reactions) and OC show correlation value of 0.484.

Finally, Table (4) proves that there is a significant and negative correlation between OS, JS, and OC. So our hypothesis is supported and it can be said that there is a significant and negative correlation between OS, JS and OC.

4.3. Organizational Silence (Support of the top Management of Silence) and JS

The relationship between OS (support of the top management of silence) and JS at the pharmaceutical industry in Egypt is determined. The first hypothesis to be tested is:

There is no relationship between OS (support of the top management of silence) and JS at the pharmaceutical industry in Egypt.

Table (5) MRA Results for OS (Support of the top Management of Silence) and JS

The Variables of OS (Support of the top Management of Silence)	Beta	R	R ²
1. Organization's management believes that its role is limited to the implementation of instructions.	0.479**	0.391	0.152
2. The organization is not interested in encouraging employees to express their opinions or suggestions concerning aspects of the work.	0.360	0.302	0.091
3. Management of the organization does not tend to serious discussion of the views and suggestions of employees.	0.235*	0.209	0.043
4. Management of the organization does not express gratitude to workers for their opinions and suggestions for useful work.	0.065	0.196	0.038
5. I do not feel comfortable when management of the organization is involved in solving a problem belonging to me personally.	0.206	0.288	0.082
<ul style="list-style-type: none"> ▪ MCC ▪ DC ▪ Calculated F ▪ Degree of Freedom ▪ Indexed F ▪ Level of Significance 		0.418 0.175 13.108 5, 309 3.78 0.000	
** P < 0.01 * P < 0.05			

Table (5) proves that there is a relationship between OS (support of the top management of silence) and JS at significance level of 0,000. As a result of the value of R^2 , the 5 independent variables of support of the top management of silence can explain 17.5% of the total differentiation in JS level.

For the results of a structural analysis of the MRA, the direct effect of OS (support of the top management of silence) and JS is obtained. Because MCC is 0.418, it is concluded that there is enough empirical evidence to reject the null hypothesis.

4.4. Organizational Silence (Lack of Communication Opportunities) and JS

The relationship between OS (lack of communication opportunities) and JS at the pharmaceutical industry in Egypt is determined. The second hypothesis to be tested is:

There is no relationship between OS (lack of communication opportunities) and JS at the pharmaceutical industry in Egypt.

Table (6) MRA Results for OS (Lack of Communication Opportunities) and JS

The Variables of OS (Lack of Communication Opportunities)	Beta	R	R ²
1. There is no exchange of information between various departments and divisions within the organization.	0.066	0.320	0.102
2. The chances of communication between employees in other departments are not enough	0.018	0.212	0.044
3. Management of the organization does not notify the staff with the organization's important problems and issues.	0.225*	0.209	0.043
4. There is not enough channels of communication between employees and senior management of the organization.	0.523**	0.391	0.152
5. Management of the organization does not bother to hold meetings to discuss issues and matters relating to work.	0.143	0.302	0.091
6. My superiors at work do not possess the good skills needed for listening to my views and suggestions.	0.058	0.196	0.038
<ul style="list-style-type: none"> ▪ MCC ▪ DC ▪ Calculated F ▪ Degree of Freedom ▪ Indexed F ▪ Level of Significance 		0.415 0.173 10.704 5, 308 3.01 0.000	
** P < 0.01 * P < 0.05			

As Table (6) proves, the MRA resulted in the R of 0.415. This means that JS has been significantly explained by the 5 independent variables of lack of communication opportunities. Furthermore, the R^2 of 0.173 indicates that the percentage of the variable interprets the whole model, that is, 17.3%. It is evident that the five independent variables justified 17.3% of the total factors of JS. Hence, 82.7% are explained by the other factors. Therefore, there is enough empirical evidence to reject the null hypothesis.

4.5. Organizational Silence (Support of Supervisor for Silence) and JS

The relationship between OS (support of supervisor for silence) and JS at the pharmaceutical industry in Egypt is determined. The third hypothesis to be tested is:

There is no relationship between OS (support of supervisor for silence) and JS at the pharmaceutical industry in Egypt.

Table (7) MRA Results for OS (Support of Supervisor for Silence) and JS

The Variables of OS (Support of Supervisor for Silence)	Beta	R	R ²
1. I hesitate to speak freely with my direct manager concerning a problem at work.	0.363**	0.358	0.128
2. My direct manager does not care about any negative information about my performance.	0.338	0.288	0.082
3. My direct manager sees any criticism against him a sort of challenging him.	0.506*	0.302	0.091
4. My direct manager suspects the source of my information concerning my performance at work.	0.168*	0.196	0.038
5. My direct manager sees the difference in opinion on the problems of working longer unhelpful.	0.042	0.165	0.027
<ul style="list-style-type: none"> ▪ MCC ▪ DC ▪ Calculated F ▪ Degree of Freedom ▪ Indexed F ▪ Level of Significance 		0.382 0.146 10.530 5, 309 2.63 0.000	
** P < 0.01		* P < 0.05	

Table (7) proves that there is a relationship between OS (support of supervisor for silence) and JS. As a result of the value of R², the 5 independent variables of support of supervisor for silence can explain 14.6% of the total differentiation in JS level. For the results of a structural analysis of the MRA, the direct effect of OS (support of supervisor for silence) and JS is obtained. Because MCC is 0.382, there is enough empirical evidence to reject the null hypothesis.

4.6. Organizational Silence (Official Authority) and JS

The relationship between OS (official authority) and JS at the pharmaceutical industry in Egypt is determined. The fourth hypothesis to be tested is:

There is no relationship between OS (official authority) and JS at the pharmaceutical industry in Egypt.

Table (8) MRA Results for OS (Official Authority) and JS

The Variables of OS (Official Authority)	Beta	R	R ²
1. My direct manager depends mainly on the official authority to influence subordinates.	0.355**	0.391	0.152
2. My direct manager draws on the method of threatening with punishment to guide the behavior of subordinates.	0.125	0.302	0.091
3. My direct manager accepts excuses of subordinates with difficulty when they commit negligence in their work.	0.107	0.209	0.043
4. My direct manager directs the behavior of subordinates through compliance with laws and regulations.	0.120	0.196	0.038
5. My direct manager complies with laws and regulations in force when solving problems of subordinates.	0.238**	0.361	0.130
<ul style="list-style-type: none"> ▪ MCC ▪ DC ▪ Calculated F ▪ Degree of Freedom ▪ Indexed F ▪ Level of Significance 		0.466 0.217 17.137 5, 309 3.78 0.000	
** P < 0.01			

Table (8) proves that there is a relationship between OS (official authority) and JS at significance level of 0,000. As a result of the value of R^2 , the 5 independent variables of official authority can explain 21.7% of the total differentiation in JS level. For the results of a structural analysis of the MRA, the direct effect of OS (official authority) and JS is obtained. Because MCC is 0.466, it is concluded that there is enough empirical evidence to reject the null hypothesis.

4.7. Organizational Silence (Subordinate's Fear of Negative Reactions) and JS

The relationship between OS (subordinate's fear of negative reactions) and JS at the pharmaceutical industry in Egypt is determined. The fifth hypothesis to be tested is:
There is no relationship between OS (subordinate's fear of negative reactions) and JS at the pharmaceutical industry in Egypt.

Table (9) MRA Results for OS (Subordinate's Fear of Negative Reactions) and JS

The Variables of OS (Subordinate's Fear of Negative Reactions)	Beta	R	R ²
1. I feel afraid to inform my direct manager with the problems of work in the organization.	0.003	0.145	0.021
2. I don't tend to talking about the negative working conditions for fear of being held accountable.	0.499*	0.302	0.091
3. I prefer to stay silent in order to avoid conflicts or disagreements with superiors.	0.027	0.288	0.082
4. I prefer to stay silent for fear of breaking my relationships with my colleagues.	0.097	0.237	0.056
5. I prefer to stay silent not to be considered a problem-maker.	0.137	0.209	0.043
6. My speaking of work problems could be harmful to my personal interests.	0.132	0.196	0.038
<ul style="list-style-type: none"> ▪ MCC ▪ DC ▪ Calculated F ▪ Degree of Freedom ▪ Indexed F ▪ Level of Significance 		0.333	
		0.111	
		6, 423	
		6, 308	
		3.01	
		0.000	
** p < .01			

As Table (9) proves, the MRA resulted in the R of 0.333. This means that JS has been significantly explained by the 5 independent variables of subordinate's fear of negative reactions.

Furthermore, the R^2 of 0.111 indicates that the percentage of the variable interprets the whole model, that is, 11.1%. It is evident that the six independent variables justified 11.1% of the total factors of JS. Hence, 88.9% are explained by the other factors. Therefore, there is enough empirical evidence to reject the null hypothesis.

4.8. Organizational Silence (Support of the top Management of Silence) and OC

The relationship between OS (support of the top management of silence) and OC at the pharmaceutical industry in Egypt is determined. The sixth hypothesis to be tested is:
There is no relationship between OS (support of the top management of silence) and OC at the pharmaceutical industry in Egypt.

Table (10) proves that there is a relationship between OS (support of the top management of silence) and OC at significance level of 0,000. As a result of the value of R^2 , the 5 independent variables of support of the top management of silence can explain 31.4% of the total differentiation in OC level.

For the results of a structural analysis of the MRA, the direct effect of OS (support of the top management of silence) and OC is obtained. Because MCC is 0.560, it is concluded that there is enough empirical evidence to reject the null hypothesis.

Table (10) MRA Results for OS (Support of the top Management of Silence) and OC

The Variables of OS (Support of the top Management of Silence)	Beta	R	R ²
1. Organization's management believes that its role is limited to the implementation of instructions.	0.384**	0.516	0.266
2. The organization is not interested in encouraging employees to express their opinions or suggestions concerning aspects of the work.	0.409*	0.503	0.253
3. Management of the organization does not tend to serious discussion of the views and suggestions of employees.	0.313**	0.381	0.145
4. Management of the organization does not express gratitude to workers for their opinions and suggestions for useful work.	0.219*	0.446	0.198
5. I do not feel comfortable when management of the organization is involved in solving a problem belonging to me personally.	0.142	0.483	0.233
<ul style="list-style-type: none"> ▪ MCC ▪ DC ▪ Calculated F ▪ Degree of Freedom ▪ Indexed F ▪ Level of Significance 		0.560 0.314 28.280 5, 309 3.78 0.000	
** P < 0.01 * P < 0.05			

4.9. Organizational Silence (Lack of Communication Opportunities) and OC

The relationship between OS (lack of communication opportunities) and OC at the pharmaceutical industry in Egypt is determined. The seventh hypothesis to be tested is:

There is no relationship between OS (lack of communication opportunities) and OC at the pharmaceutical industry in Egypt.

Table (11) MRA Results for OS (Lack of Communication Opportunities) and OC

The Variables of OS (Lack of Communication Opportunities)	Beta	R	R ²
1. There is no exchange of information among various departments and divisions within the organization.	0.107	0.434	0.188
2. The chances of communication among employees in other departments are not enough	0.063	0.370	0.136
3. Management of the organization does not notify the staff with the organization's important problems and issues.	0.306**	0.381	0.145
4. There is not enough channels of communication between employees and senior management of the organization.	0.464**	0.516	0.266
5. Management of the organization does not bother to hold meetings to discuss issues and matters relating to work.	0.226	0.503	0.253
6. My superiors at work do not possess the good skills needed for listening to my views and suggestions.	0.224*	0.446	0.198
<ul style="list-style-type: none"> ▪ MCC ▪ DC ▪ Calculated F ▪ Degree of Freedom ▪ Indexed F ▪ Level of Significance 		0.560 0.313 23.426 6, 308 3.01 0.000	
** P < 0.01 * P < 0.05			

As Table (11) proves, the MRA resulted in the R of 0.560. This means that OC has been significantly explained by the 5 independent variables of lack of communication opportunities.

Furthermore, the R² of 0.313 indicates that the percentage of the variable interprets the whole model, that is, 31.3%. It is evident that the five independent variables justified 31.3% of the total factors of OC.

Hence, 68.7% are explained by the other factors. Therefore, there is enough empirical evidence to reject the null hypothesis.

4.10. Organizational Silence (Support of Supervisor for Silence) and OC

The relationship between OS (support of supervisor for silence) and OC at the pharmaceutical industry in Egypt is determined. The eighth hypothesis to be tested is:

There is no relationship between OS (support of supervisor for silence) and OC at the pharmaceutical industry in Egypt.

Table (12) MRA Results for OS (Support of Supervisor for Silence) and OC

The Variables of OS (Support of Supervisor for Silence)	Beta	R	R ²
1. I hesitate to speak freely with my direct manager concerning a problem at work.	0.292**	0.479	0.229
2. My direct manager does not care about any negative information about my performance.	0.221	0.483	0.233
3. My direct manager sees any criticism against him a sort of challenging him.	0.460*	0.503	0.253
4. My direct manager suspects the source of my information concerning my performance at work.	0.091	0.446	0.198
5. My direct manager sees the difference in opinion on the problems of working unhelpful.	0.094*	0.203	0.041
<ul style="list-style-type: none"> ▪ MCC ▪ DC ▪ Calculated F ▪ Degree of Freedom ▪ Indexed F ▪ Level of Significance 		0.535 0.287 24.829 5, 309 2.63 0.000	
** P < 0.01		* P < 0.05	

Table (12) proves that there is a relationship between OS (support of supervisor for silence) and OC. As a result of the value of R², the 5 independent variables of support of supervisor for silence can explain 28.7% of the total differentiation in OC level.

For the results of a structural analysis of the MRA, the direct effect of OS (support of supervisor for silence) and OC is obtained. Because MCC is 0.535, there is enough empirical evidence to reject the null hypothesis.

4.11. Organizational Silence (Official Authority) and OC

The relationship between OS (official authority) and OC at the pharmaceutical industry in Egypt is determined. The ninth hypothesis to be tested is:

There is no relationship between OS (official authority) and OC at the pharmaceutical industry in Egypt.

Table (13) MRA Results for OS (Official Authority) and OC

The Variables of OS (Official Authority)	Beta	R	R ²
1. My direct manager depends mainly on the official authority to influence subordinates.	0.287**	0.516	0.266
2. My direct manager draws on the method of threatening with punishment to guide the behavior of subordinates.	0.244*	0.503	0.253
3. My direct manager accepts excuses of subordinates with difficulty when they commit negligence in their work.	0.212*	0.381	0.145
4. My direct manager directs the behavior of subordinates through compliance with laws and regulations.	0.174*	0.446	0.198
5. My direct manager complies with laws and regulations in force when solving problems of subordinates.	0.190**	0.387	0.149
<ul style="list-style-type: none"> ▪ MCC ▪ DC ▪ Calculated F ▪ Degree of Freedom ▪ Indexed F ▪ Level of Significance 		0.584 0.341 32.008 5, 309 2.63 0.000	
** P < .01 * P < .05			

Table (13) proves that there is a relationship between OS (official authority) and OC at significance level of 0,000. As a result of the value of R², the 5 independent variables of official authority can explain 34.1% of the total differentiation in OC level.

For the results of a structural analysis of the MRA, the direct effect of OS (official authority) and OC is obtained. Because MCC is 0.584, it is concluded that there is enough empirical evidence to reject the null hypothesis.

4.12. Organizational Silence (Subordinate's Fear of Negative Reactions) and OC

The relationship between OS (subordinate's fear of negative reactions) and OC at the pharmaceutical industry in Egypt is determined. The tenth hypothesis to be tested is:

There is no relationship between OS (subordinate's fear of negative reactions) and OC at the pharmaceutical industry in Egypt.

As Table (14) proves, the MRA resulted in the R of 0.521. This means that OC has been significantly explained by the 5 independent variables of subordinate's fear of negative reactions.

Furthermore, the R² of 0.27.1 indicates that the percentage of the variable interprets the whole model, that is, 27.1%. It is evident that the six independent variables justified 27.1% of the total factors of OC. Hence, 72.9% are explained by the other factors. Therefore, there is enough empirical evidence to reject the null hypothesis.

Table (14) MRA Results for OS (Subordinate's Fear of Negative Reactions) and OC

The Variables of OS (Subordinate's Fear of Negative Reactions)	Beta	R	R ²
1. I feel afraid to inform my direct manager with the problems of work in the organization.	0.011	0.276	0.076
2. I don't tend to talking about the negative working conditions for fear of being held accountable.	0.539*	0.503	0.253
3. I prefer to stay silent in order to avoid conflicts or disagreements with superiors.	0.013	0.483	0.233
4. I prefer to stay silent for fear of breaking my relationships with my colleagues.	0.061	0.326	0.106
5. I prefer to stay silent not to be considered a problem-maker.	0.234*	0.381	0.145
6. My speaking of work problems could be harmful to my personal interests.	0.164*	0.446	0.198
<ul style="list-style-type: none"> ▪ MCC ▪ DC ▪ Calculated F ▪ Degree of Freedom ▪ Indexed F ▪ Level of Significance 		0.521 0.271 19.118 6, 308 3.01 0.000	
* P < 0.05			

5. Research Findings

The present study on analyzing the relationship between OS and JA at the pharmaceutical industry in Egypt revealed the following results:

1. There is a significant relationship between OS and JS at the pharmaceutical industry in Egypt. OS affects JS and OC of the employees. There is a correlation between ES and JS. This is because silence leads to a negative impact on the JS of the employees and their OC. In other words, a climate of silence in organization causes an inability to achieve the expected benefits of employees' job satisfaction. Another study conducted by Milliken & Morrison (2003); Premeaux & Bedeian (2003); (Vakola & Bouradas (2005); Detert & Edmondson (2005); and Maria (2006), concluded that it will be very hard to remain silent for employees on the issues, especially, if they feel competent in the matter. As a result, they feel demoralized, stressful, and unappreciated. ES reduce individual JS in the organizations. Silence adversely affects JS of the employees, as there is an inverse relationship between ES and JS. This is because silence leads to a negative impact on the satisfaction of the employees at the organization.
2. This study concluded that the OS negatively related with OC at the pharmaceutical industry in Egypt. In other words, there is a significant negative relationship between silence and commitment in organizations. Another study conducted by Farrell (1983); Rusbult et al, (1982); Li-hong, et al., (2011); Nikolaou, et al., (2011), concluded that employees may show slack and disregardful behavior in some situations.

6. Research Recommendations

1. Officials should work in the organization to create a culture that will encourage employees to speak, and not to keep silent regarding all critical business issues so that we can know their problems and try to resolve them.
2. The need to increase attention and action on the coherence of the Organization group, as well as the professional commitment and procedural justice because of its inverse relationship to silent workers. It has been found that the more these variables exit, the less workers keep silent.
3. The need for increased attention on the part of senior management to support the exchange of information and ideas with employees in the organization process because its significant correlation

effect is obvious to silence workers. The civil servant who feels that his heads do not care about his views would be more silent.

4. Notes from the results of the study also showed significant correlation between the extent of adoption of the supervisors of the behavior of silence and silent workers. This means that supervisors ought to pay due attention to the opinions and suggestions of subordinates.
5. Paying attention to officials in the organization, including the development of effective communication channels between workers, as well as transferring their knowledge and skills to those responsible for decision-making. This is reflected in increased confidence of senior management personnel lowering their silence about the critical issues in the organization.

7. Research Implications

The findings of the study should contribute to managers and practitioners becoming more aware of ES. In addition, management should encourage employees to express their relevant ideas, information and opinions.

The ambiguity of the role or tasks of the employee leads to role conflict, which contributes to an increasing climate of silence.

Therefore, the clarity of the role and duties of the employee lead to a sense of employee comfort and some kind of harmony or balance between the formal role and the role expected, which helps reduce OS (Deci, et al., 1989).

The nature of silence behavior makes it difficult to break. This may be due to the fact that OS may be a result of lack of confidence in the organization.

It may be difficult to restore that trust in a short period of time. This is because breaking silence and transition from a climate of silence to one that encourages talking may need a revolutionary or radical change of system (Morrison & Milliken, 2000).

Silence climate has an impact on organization's ability to detect errors and learn and therefore, organizational effectiveness is negatively affected. ES behaviour can also create stress, cynicism, and dissatisfaction (Tamuz, 2001).

Breaking silence needs a vision which can provide a climate that helps in engagement and talking. Silence can be overcome through (1) encouraging employees to talk about work issues and choosing the appropriate time for that, (2) increasing employees' exchange and circulation of new ideas, (3) coordination between different departments and divisions within the organization, (4) provision of good channels of communication between the employees within the organization, (5) paying attention to the morale of the employees within the organization, (6) provision of organizational support for the exchange of ideas associated to labor issues, and (7) encouraging employees to creative thinking within the organization (Piderit & Ashford, 2003).

Another way of breaking silence would be through the keenness of the leaders of organizations to fight or prevent any impediments to the transfer or exchange of upwards information relating to problems and issues of work (Edmondson, 2003).

Top managers and supervisors have to create a workplace where employees will feel safe to express their views and will be encouraged to offer their ideas and suggestions. Therefore, top managers and supervisors should develop attitudes and engage in behaviours that would create a psychologically safety net for their employees. (Vakola & Bouradas, 2005).

There are some tools that can be used for the purpose of breaking OS. They are (1) the need to motivate employees to talk and provide their opinions and suggestions about work problems, (2) developing effective communication channels which support exchange and transfer of ideas and information, and (3) the need to employ and attract talented employees especially those who have high levels of OC. This is because these employees have a high tendency to speak and participate in labor issues (Vakola & Bouradas, 2005).

Organizations today need not only to recruit but also to retain and motivate talented employees. The relationship between silence climate and OC and JS showed that managers need to leave "space" for open discussions and even for negative feedback, as a way of communication and continuous improvement.

As a result, managers may consider OS as an important variable when they explore organizational climate and culture or when they want to create an environment where talented people would choose to

remain or wish to join. These practical implications are also important in a change context where the “truth” must be heard in order to be able to effectively implement and institutionalize the change and improve the existing situation (Vakola & Bouradas, 2005).

Finally, employees are regarded as major sources of change, creativity, learning, and innovation, which are critical factors to the success of organizations. However, many employees choose not to voice their opinions and concerns about matters in their organizations. Also, employees choose organizations in which they can express themselves (Liu, et al. 2009).

8. Limitations and Future Research

There are some limitations of this study. They are (1) data was gathered from one private sector in Egypt. Therefore, the findings of this research need to be evaluated with this in mind. The survey answers are related to the perception of employees at that moment, (2) the respondents were unwilling to answer the questionnaires accurately. Therefore, before distributing questionnaires among respondents, we attempted to describe the positive effects of the results of this research on their work-life quality and satisfying their needs, (3) the current study is about cause and effect relationship among research variables; maybe there are other factors that affect research variables, which need to be identified.

There are several areas for future research. They are (1) identifying factors that affect employees' silence; (2) identifying the effects of leadership style on employees' silence, (3) identifying the effects of demographic variables on employees' silence, (4) identifying the relationship between organizational culture and OS, (5) identifying the relationship between organizational citizenship behavior and OS, (6) identifying the relationship between organizational success and OS, (8) identifying the relationship between organizational excellence and OS (9) silence motivations (DS, relations, supportive silence, de facto silence, the silence of negligence) in service organizations, (10) the relationship between silence and organizational justice within business organizations, (11) comparing determinants of silence in the production and service organizations, and (12) the relationship between the determinants of OS and work involvement.

9. Conclusion

The present paper aims at exploring the relationship between OS and JA (JS and OC). Although there is an increasing awareness about silence in organizations, there have not been consistent findings relating it to commitment.

The results support the view that there is a negative and significant relationship between defensive ES and OC. The results are consistent with research conducted by (Daigle, 2007; Lambert et al., 2008).

Our findings support the view that OC has a significant negative influence on OS. The results are consistent with research conducted by Li-Hong et al, 2011; Nikolaou and Bourantas, 2011.

OS is a variable which can prevail about barriers to effectiveness, commitment and performance (Beer,2009). Similarly, in other studies, Li-Hong et al., (2011) and Nikolaou et al., (2011), perused this relationship in different environments, empirically. The result of these researches confirms others totally and shows that there is a significant negative relationship between silence and commitment in organizations (Li-Hong et al, 2011; Nikolaou et al., 2011).

OC can have both positive and negative effects on OS depending upon the particular commitment of the employee. Studies have found a correlation between OS and employee commitment. It has also been found that the relationship between OC and silence can vary greatly between groups within an organization. These groups remain silent for different reasons which depend on the situation of the employee group. It is believed that by reducing factors which lead to OS, for example, by instituting an open culture both within and outside the organization, as well as important changes in the structure of the organization and management styles, can lead to the elimination of silence behaviour within employee groups. This in turn makes employees feel more secure within the organization and hence improves effective commitment of employees to the organization (Dimitras & Vakola, 2003; Nikmaram et al., 2012).

In organizations, decrease on an employee's trust in the organization and OC can be observed due to not expressing problems and employee's being affected negatively from these problems. As a result of this, work success of the employees can decrease. Leading problems caused by OS are employees' inability to produce new solutions and not being open for improvement (Ozdemir & Ugur, 2013).

Other researchers have indicated positive and negative relations between AC to the organization and employee well-being (Meyer & Maltin, 2010) such as overall physical well-being (Siu, 2002), general health (Bridger et al., 2007; Mor et al., 2006), mental health (Grawitch et al., 2007; Probst, 2003), positive affect (Thoresen et al., 2003), job-related well-being (Epitropaki & Martin, 2005), self-esteem (Frone, 2007), and life satisfaction (Lu et al., 2009; Zickar et al., 2004). Negative relations have consistently been found with measures of strain, including psychosomatic symptoms (Addae & Wang, 2006; Richardson et al., 2006), physical health complaints (Probst, 2003; Wegge et al., 2006), mental health complaints, such as anxiety and depression (Epitropaki & Martin, 2005; Tucker et al., 2005), negative affect (Thoresen et al., 2003), burnout (Grawitch et al., 2007; Hakanen et al., 2006), stress, distress, general strain, and job-related tension (Daigle, 2007; Lambert, et al., 2008). Other studies explain how management attitude and behaviors can, through the design of particular institutional arrangements, perpetuate a climate of silence and affect organizational participations (Donaghey et al, 2011).

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