The Impact of Electronic Communication on Job Satisfaction
(An Empirical Study on Egyptian Employees)

Dr. Amany I. Shahin*
Associate Professor Department of Management
Helwan University
Abstract

This study investigates the correlation between electronic communication and job satisfaction. It aims to identify them in the Egyptian environment, and to focus on the main factors influencing the employees in Egypt. We study the impact of electronic communication (Internet, E-mails, Instant messages, and Computerized systems) on job satisfaction. The electronic communication represents the independent variables, while the Job Satisfaction represents the dependent variable.

A questionnaire survey was used for data collection in which 210 Egyptian employees joined from different occupations and different age groups. The survey included employees from banks, petroleum sector, schools, textile industries and food industries We used a likert scale and ages between 25-56 were investigated. A likert scale was used for the first 5 items. (5) referred to strongly agree (4) agree (3) neutral (2) disagree and (1) strongly disagree. This indicated that (5) strongly agree referred to a very high degree of satisfaction while (1) strongly disagree referred to a very low degree of satisfaction. A descriptive analysis was used to categorize the respondents. Hypotheses were tested and analyzed by means of Pearson correlation analysis and regression analysis.

This study extends current research by investing electronic communications among employees in the Egyptian environment. This clarifies how Egyptian employees have been influenced by electronic communications to what extent it affected their job satisfaction. The findings of this study proved that electronic communication and Job Satisfaction are positively correlated and to a great extent electronic communication has an impact on job satisfaction. The results were beneficial and give a guide to managerial policy makers.

Keywords, Electronic Communication, Internet, E-mails, Instant messages, Computerized systems, Job Satisfaction, Egyptian Environment

*Dr.Amany Ibrahim Shahin, Assocciate Professor Department of Management, Helwan University. Ph.D Bradford University, U.K., MA, AUC, Cairo. E-mail aioshahi@hotmail.com
Introduction

Electronic Communication is now essential in our life. Today mobiles accompany a person throughout his day and allow him the access to information as well as convenience of easy communication. People are expected to be available at all times, and at any place. There is no longer any private time. Social media enabled people to share information with online network and this means creating a cultural shift within societies. (Pinchot, Paulet, & Rota, 2010). Kakabadse, Bailey & Myers (2009) investigated 267 of ages 11-18, in regard to mobile phone calls and text messaging, ninety-five percent of students had access to computers, Internet, e-mails and instant messages from :Facebook, WhatsApp and Twitter beside mobiles and the Internet are widely used these days. They made life easier in many aspects but increased irritability.

Announcement of information

Announcement of information are important for social belonging (Tamir & Mitchell, 2012). The use of Computers, Internet, E-mails and Instant messages as well as Facebook, Whats App, Twitter and Mobiles are now the main source for information. However, by announcement you lose privacy and there is also a risk of information loss and personal control by sharing information with others (Altman, 1975). People from different social groups and different ages are gathered and this is complicated as announcement addresses different audience values simultaneously (Krämer & Haferkamp, 2011). A study by Bazarova & Hyung (2014) studied self-disclosure motivations, they found that motivational drivers are the main driver of self-disclosure in social media. They supported the factor that motivational drivers are the main driver of self-disclosure in social media.

The role of parent’s communication is essential in electronic communication. It indicates parents support as well as the quality of advice received. Parents communication is very important for their children they may influence their children’s adjustment. (Hall, McNallie, Custers, Timmermans, Wilson, and Bulck, 2017).

Students feel comfortable when they speak with their parents even about difficult topics. (High & Scharp, 2015). Modern technologies enabled communication between students and parents it is a challenge of time and distance. (Ciboh, 2005). Parents’ communication is important as the new technologies impose greater control over their children especially in matters related of economic, social, political and cultural thinking. (Suter,2016).
In many aspects of our life, the use of Computers, Internet, E-mails and Instant messages as well as Facebook, WhatsApp and Twitter beside Mobiles are widely used. Electronic Communication did make life easier to a great extent but overloaded and always worried with many issues.

**Electronic Communication**

Electronic Communication stresses the role of unified communications and the integration of telecommunications, as well as necessary software, storage and audiovisual, that enable people to access, and store information.

Electronic Communication became very important on a worldwide basis, actually it is considered necessary. Social media is used to connect with friends and brands (Rambe and Retumetse, 2017) and influencers (Casalo et al., 2018) and to access information about current news and events (Allcott and Gentzkow, 2017). The use of Facebook, Twitter on a social level can help people find old friends make new friends around the globe via social networking sites. The widespread use of Computers, Internet, E-mails and Instant messages, Mobiles, Facebook, WhatsApp, and Twitter brought an increasing need of their use in all social situations.

Internet is a system that allowed various computer networks around the world to interconnect and this has changed methods of communications. The Internet is sometimes referred to as a “network of networks”. Internet plays a major role in providing a variety of ways to bring people and cultures closer together and in expanding the global knowledge base. The Internet enables companies that are miles apart to communicate and share information.

The internet has changed the advertising industry. Webpages, browsers, and social media advertising have confronted the important role of television, radio and newspapers in advertising. (Handley, 2017). Consumers have been encouraged for the transition from traditional advertising to online channels. This has been motivated by consumers’ preference ((Hussain and Lasage, 2014). Having one main Facebook page is more efficient than those having multiple Facebook pages, the length and size of history of an organization did not affect the efficiency of these companies (Ye, Lan, Cheong, Yunjae, 2017).

Computerized systems, Internet, E-mails Instant messages, Facebook, WhatsApp and Twitter beside Mobiles are widely used these days. They increased job satisfaction and made life easier in many aspects but increased irritability. They played a great role in shifting the culture.
**Job Satisfaction**

Moorhead & Griffen (1992) defined job satisfaction or dissatisfaction, as an individual's attitude towards his or her job. Based on to Greenberg & Baron (1993) job satisfaction involves positive or negative attitudes held by individuals towards their jobs. They identified that employees need to make sure that promotion takes place fairly and people tend to be satisfied with jobs that provide them with an overall workload that is not boring.

There are major organizational factors which cause employees to form attitudes towards their jobs. Thomas (1995) indicated that the involvement in decision making, the tendency towards decentralization and consideration of health and safety at the workplace is a main factor affecting job satisfaction. It is of growing importance in terms of the maintenance of employees’ health (Shahin, 1996). Job satisfaction is negatively correlated with depression (Allen & Dexter 2018). Also job satisfaction had a great effect on health, well-being self-esteem and happiness (satuf & Monteiro, 2018). Plagakis (1995) and Greenberg (1993) studied the need for affiliation to encourage participation in the social events.

There are actually two types of job satisfaction based on the level of employees' feelings regarding their jobs. They are job facet and the global job satisfaction. The first is job facet satisfaction, which refers to feelings regarding specific job aspects, such as salary, benefits, work hierarchy, growth opportunities, work environment and the quality of relationships with one's co-workers. (Mueller & Kim, 2008). The second is global job satisfaction, which refers to employees' overall feelings about their jobs. (Mueller & Kim, 2008).

Individuals assess job satisfaction by comparing the current receivables from the job with what they believe they actually should receive (Jex, 2002).

Salary is an important factor of job satisfaction (Rynes, 1987; Cable and Judge, 1994) because the main purpose of working is to earn a salary in order to meet personal needs (Kissan and Manohar, 1998). Salary includes wages, bonuses, overtime pay, benefits and allowances. A good salary system is essential for many workers. Job interest is considered as important as salary in applying for a job. Chi et al (2018) conducted a research by in Taiwan, both salary and job interest exerted a moderating effect on job satisfaction and the willingness to apply for a job. However job interest had a stronger influence than salary.

On the other hand facets of job satisfaction contribute to global job satisfaction. Job satisfaction related to the intrinsic aspects of the job (i.e. interests and skills involved
in work) contributes more to global job satisfaction than the other aspects of job (Tatsuse & Sekine, 2011). Di Paolo (2016) made a research involving Ph.D holders in Spain employed outside academic and research jobs, and found that they are more satisfied with the monetary aspects at work, but significantly less satisfied with non-monetary aspects of the job.

Job embeddedness is another important factor of job satisfaction. There is a negative relation between organizational job embeddedness and quit intention and this decreases when job satisfaction is high (Dechawatanapaisal, 2018).

Age has a positive impact on job satisfaction. Actually, the older you get the more satisfied you are with your job (Andrade & Westover, 2018). Levels of Job satisfaction and the determinants of job satisfaction differ across generations.

Internet technologies enhance job satisfaction by facilitating communication and social interactions, improving access to data and information and creating new activities. However, workers in some occupations and with higher income and education levels benefit relatively more from the Internet than workers in occupations that are more weakly related to ICTs (Castellacci & Vinas-Bradolet, 2019).

**Disposition and Satisfaction**

Internal disposition identifies the reason behind job satisfaction which justifies some people being inclined to be satisfied or dissatisfied with their work irrespective of the nature of the job or the organizational environment (Jex, 2002). Matteson & Kennedy (2016) from there study proved that affective disposition influences the job attitudes of work engagement, organizational commitment and job satisfaction.

Many researches were conducted on the dispositional source of job satisfaction and have presented strong evidence that job satisfaction to some extent is based on disposition (Judge & Larsen, 2001). Dispositional affect is the predisposition to experience related emotional moods over time (Judge & Kammeyer-Mueller, 2008).
**Productivity and Satisfaction**

The idea that a happy worker is a productive worker has been critically examined by many researchers. Iaffaldano and Muchinsky (1985) have found a weak connection, between job satisfaction and job performance. However, Judge, Thoreson, Bono, and Patton (2001) discovered that the correlation between job satisfaction and job performance is high. Saari & Judge (2004) found that it is important to note that the connection between job satisfaction and job performance is higher for difficult jobs than for less difficult jobs.

A link does exist between job satisfaction and job performance; however, it is not as strong as one thinks. The weak link may be attributed to factors such as economic conditions or job structure. It is likely that a satisfied worker may miss work due to personal matters or illness. While, an unsatisfied worker may not miss work because he does not have any sick time and cannot afford the loss of income. Organ (1988) believes that when the definition of job performance includes behaviors such as organizational citizenship the relationship between satisfaction and performance will improve.

One important factor affecting turnover would be an economic downturn, during which unsatisfied workers may not have other employment opportunities. On the other hand, a satisfied worker may be forced to resign his for personal reasons such as relocation or illness (Carsten, & Spector, 1987). Medina (2012) found that job satisfaction was strongly inversely correlated with turnover intention and this relationship was mediated by satisfaction in the workplace. Not only is satisfaction important in running a happy and productive workplace but job dissatisfaction can cost the company and be a great disadvantage (Notte, 2013).

**Job Dissatisfaction**

There are many consequences of job dissatisfaction the most important are those that affect life satisfaction as physical health and mental health. Henne & Locke (1985) believed that work is a component of a person’s life and will affect people’s attitude towards life as a whole and this implies that it will affect work. Locke (1976) suggests that the existence of dissatisfaction implies conflict in the employees mind this indicates that his mental health is affected. Mental illness occurs more likely when an individual's values and actions are part of the problem (Henne & Lock, 1985). If the dissatisfaction event increases it may have health implications.
Actually, dissatisfaction leads to mental illness. Many studies have proven the physical effects that dissatisfaction can have on the body (Henne & Locke, 1985).

In addition to the mental problems job dissatisfaction affects the work itself. The effects of job dissatisfaction are mainly turnover and absenteeism and in some cases this could lead to early retirement.

Electronic communication widely affects job satisfaction. Actually, the use of Internet, WhatsApp, Twitter, Mobiles and Facebook widely cause job satisfaction. Life satisfaction to a great extent is affected as obtaining information is easily assessable.

During the Corona pandemic work performance and satisfaction are deeply associated with electronic communication most of the people nowadays are working online which was not the case previously. People are satisfied by working at home as it is much comfortable and saves transportation costs. However, it to a great extent affected the social life of people, nowadays people are separated.

This research aims to investigate the impact of electronic communication on job satisfaction. The electronic communication used (Computerized systems, E-mails, Internet, Instant messages as well as Facebook, Twitter, Mobiles, and What App) to measure its impact on Job satisfaction.

**Research Design and Methodology**

**Research hypotheses:**

H1: Electronic Communication is positively correlated with Job Satisfaction

H2: Computerized Systems have a positive impact on Job Satisfaction

H3: E-mails have a positive impact on Job Satisfaction

H4: Internet has a positive impact on Job Satisfaction

H5: Messages have a positive impact on Job Satisfaction

This study is a hypotheses testing research. Convenience sampling was used to collect data. Convenient sampling was used because it is considered quick and less expensive. The nature of the Egyptian employees was investigated.
A likert scale was used for the first 5 items. (5) referred to strongly agree (4) agree (3) neutral (2) disagree and (1) strongly disagree. This indicated that (5) strongly agree referred to a very high degree of satisfaction, while (1) strongly disagree referred to a very low degree of satisfaction.

The survey was conducted on Egyptian employees. The survey included different age groups and occupation. The survey included employees from banks, petroleum sector, schools, textile industries and food industries Questionnaires were distributed in both sectors (Public and Private). The results were a total of 10 usable responses from distributed questionnaires. The first eight items were asking about the electronic communication, the following four items concentrated on job satisfaction. The first eight items were asking about the electronic communication used (Computerized systems, E-mails, Internet, and Instant messages) and the following four items were asking about job satisfaction.

<table>
<thead>
<tr>
<th>Table 1 Questions and Related variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question</td>
</tr>
<tr>
<td>1) Using computerized systems is one of my daily activities at work</td>
</tr>
<tr>
<td>2) I use my computer daily at work</td>
</tr>
<tr>
<td>3) Internet is very important for my daily work</td>
</tr>
<tr>
<td>4) Internet is with me on my mobile for urgent cases</td>
</tr>
<tr>
<td>5) Instant messages are now part of my life</td>
</tr>
<tr>
<td>6) I use my instant messages all of the time to contact people at work</td>
</tr>
<tr>
<td>7) Sending e-mails is now essential in my day</td>
</tr>
<tr>
<td>8) I use e-mails every day at work.</td>
</tr>
<tr>
<td>9) I work much faster</td>
</tr>
<tr>
<td>10) I work much easier</td>
</tr>
<tr>
<td>11) I am comfortable at work</td>
</tr>
<tr>
<td>12) I relate with my friends at work</td>
</tr>
</tbody>
</table>
We are going to see how the hypotheses are investigated by variables

Table 2 Hypotheses and Variables investigated

<table>
<thead>
<tr>
<th>H1</th>
<th>Q1-8 and Q.9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2</td>
<td>Q.1-2 and Q.9-12</td>
</tr>
<tr>
<td>H3</td>
<td>Q.3-4 and Q.9-12</td>
</tr>
<tr>
<td>H4</td>
<td>Q.5-6 and Q.9-12</td>
</tr>
<tr>
<td>H5</td>
<td>Q.7-8 and Q.9-12</td>
</tr>
</tbody>
</table>

The questionnaire was divided into two sections. The first section was descriptive. It included information about experience and age. The second section included information about electronic communication (Computerized systems, E-mail, Internet and Instant messages) and Job satisfaction.

A correlation analysis was conducted to measure the association of Electronic Communication and Job Satisfaction. Then a regression analysis was conducted to measure the impact Electronic Communication on Job Satisfaction. A regression analysis was conducted to explain the relation between the dependent variable and the independent variables (Haire et al, 1995). Regression analysis in the form of multiple regressions was the most widely used method for conducting multivariate analysis, particularly when more than three variables are involved (Bryman & Cramer, 1998). Actually, in this study we used the stepwise method as it is useful for exploratory studies (Field, 2003).

Firstly, a correlation analysis was conducted to measure the correlation between Electronic communication and Job satisfaction. Correlation analysis was used to test the other hypotheses. It is one of the basic in the elaboration of bivariate relationships (Bryman and Cramer, 1998). Correlation is a method to indicate the strength and direction (positive or negative) of the relationship between a pair of variables (Amin, 2008). In our study we will use Pearson Product Moment Correlation because this measurement is suitable for our variables which are considered interval. Tables 3 show the Correlation analysis.

Table 3 The correlation between electronic communication Factors and Job satisfaction
Table 3 shows a positive correlation between Electronic Communication and Job Satisfaction. Actually, Job Satisfaction is positively associated with the Internet at .333** Sig at .000, with E-mails at .366** Sig at .000, with Instant messages at .361** Sig at .000 and with Computerized systems at .391** Sig at .000. So our first hypothesis is accepted.

Secondly, a regression analysis was conducted to measure the impact Electronic Communication on Job Satisfaction. A regression analysis was conducted to explain the relation between the dependent variable and the independent variables (Haire et al, 1995). Actually, in this study we used the stepwise method as it is useful for exploratory studies (Field, 2003). Table 4 shows us the result of the regression analysis as follows:

**Table 4 Impact of factors of Electronic Communication on Job Satisfaction**
All of the factors of Electronic Communication entered the equation and three of them remained. Instant messages had the greatest impact on Job Satisfaction while Computerized Systems had the least impact.

R square which is the percentage of variation in the dependent variable explained by the independent variable was 0.239 and the F test was 37.431 sig. at 0.000. The T test and the beta coefficients were presented in the table. For Instant messages the Beta was 0.246 and the T test was 3.662 for Internet the Beta was 0.226 while the T test 3.377, for Computerized Systems the Beta is 0.188 and the T test is 2.653.

As Computerized systems, Internet and Instant messages have a positive impact on Job Satisfaction this indicates that hypotheses 2, 4 and 5 are accepted. While, hypothesis 3 is rejected as e-mail did not enter the equation.

So

H2: Computerized Systems have a positive impact on Job Satisfaction (accepted)
H3: E-mails have a positive impact on Job Satisfaction (rejected)
H4: Internet has a positive impact on Job Satisfaction (accepted)
H5: Messages have a positive impact on Job Satisfaction (accepted).

**Fig 1 ELECTRONIC COMMUNICATION MODEL**
The figure shows the results of the study which indicates three main electronic communication methods which influence job satisfaction. The three electronic communication methods are Instant messages, E-mails and Computerized systems. These are the most important electronic communication methods for the job satisfaction of the Egyptian employees. This gives an indication for managers to focus on these aspect for the satisfaction and performance of Egyptian employees at work.

**Discussion**

The results of the study supported some of our hypotheses. The Instant messages had the greatest impact on Job Satisfaction. On the other hand the Computerized system had the least impact on Job Satisfaction.

According to the correlation analysis, Electronic Communication are correlated with Job Satisfaction. The Internet, E-mails, Instant messages, computerized systems are correlated positively with Job Satisfaction.

The Electronic Communication shows a positive high correlation between its entire factor (Internet, E-mails, Instant messaging and Computerized systems) and Job Satisfaction.

They seem to be satisfied and use all of the Electronic Communication tools. They seem to be comfortable, faster, and more efficient. All of the relevant electronic communication increases their concentration and gives them more time to work. These tools help them to stay in touch with other people, and support them especially during Covid-19 pandemic.

**Conclusion & Recommendations**

The study investigates Electronic Communications for employees in the Egyptian context. The results of this study gave us an indication of electronic communication affecting job satisfaction. It is essential to increase the people’s awareness of electronic communications used nowadays and job satisfaction. Tools are used to increase efficiency, time used and comfort. It is important to provide people with information about the different electronic communication they should deal with to keep in contact and orient the Egyptian employees to accept and deal with any changes especially during Covid-19 pandemic.

Further research is needed to illustrate the electronic communication methods preferred by different occupations and age groups in Egypt and other Arab countries. This helps to facilitate business all over the world. More questions may be needed to elicit more information on electronic communication, this issue is worthy of more research.
References


Amin, Osama Rabea (2008) Statistical Analysis for different variables by using SPSS, Egypt: Monofya University (In Arabic)


Chi, Hsingkuang, Yeh, Hueryren, Guo, Tingwei (2018) Salary or job interest? How salary and job interest moderates the willingness to apply for a job, Asia-Pacific Journal of Business Administration, Vol. 10 No. 1, pp.64-78.


Hall, Elizabeth Dorrance, , McNallie, Jenna, Custers,Kathleen, Timmermans, Elisabeth, Wilson,Steven Bulck, R., and Jan Van den (2017), A Cross-Cultural Examination of the Mediating Role of Family Support and Parental Advice Quality on the Relationship Between Family Communication Patterns and First-Year College Student Adjustment in the United States and Belgium, Communication Research Vol. 44 No.5, pp. 638 –667.


