

The Effect of Effective Educational Communication on Job Satisfaction of Teachers among Public Secondary School Principals in The Arab Republic of Egypt

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To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v14-i3/20985>

DOI:10.6007/IJARBSS/v14-i3/20985

Published Date: 16 March 2024

Abstract

This research investigated the effect of educational communication among public secondary school principals (government) on job satisfaction among teachers in Dakahlia Governorate in the Arab Republic of Egypt. The researcher used the quantitative method; the population of this study consisted of (5428) male and female teachers in the context of the study. The researcher self-administered the questionnaire, it was distributed to a random sample of (359) male and female teachers in general secondary education schools (governmental). Inferential methods were also used such as: employing the Cronbach alpha coefficient to verify the stability of the research tool (the questionnaire). The researcher used structural equation modelling (SEM), and path analysis using (AMOS) and (SPSS) programs, and confirmatory factor analysis (CFA). The results of the research revealed that there are high levels of agreement among members of the research sample for the effective communication skills of secondary school principals, for each of the skills: speaking, writing, listening, reading, and thinking, respectively. The results also revealed that there was a discrepancy in the responses of the research sample in terms of the degree of agreement with the dimensions of job satisfaction, as their response came in the level of agreement with the dimensions (satisfaction with work tasks and duties, satisfaction with relationships with colleagues and superiors, satisfaction with respect and appreciation) and came neutral for the dimensions (satisfaction with Working conditions, job stability, satisfaction with training, qualification and career advancement, and satisfaction with salary, rewards and incentives). The results also revealed a direct, statistically significant positive effect of effective educational communication on job satisfaction among secondary school teachers in the Arab Republic of Egypt.

Keywords: Influence, Educational Communication, Job Satisfaction, Secondary School Principals, Teachers

Introduction

Communication is one of the most important social processes that emerged with the beginning of human existence on the face of the planet Earth. Communication began simple and direct and aimed to satisfy the basic needs of humans. Then it quickly developed and became more complex with the complexity and development of life until it reached its highest levels in our era. the present. The educational process is essentially a process of communication and communication, and the educational system is a living example of the interactions that occur within society. In order for an effective, healthy and positive communication climate to be achieved within the school, the school principal, who is the educational leader, must also be effective and influential, and this can only be achieved. For those who have a clear and accurate conception of communication and educational communication skills, which they apply effectively in directing all those working with them, including teachers and administrators, the most prominent of which are: speaking skill, listening skill, writing skill, thinking skill, and reading skill. Since the process of educational communication and communication includes decision-making processes and the exchange of information and ideas, it plays a vital and effective role in both the teaching and learning processes. Through it, interaction can be created between all elements of the educational system, as the effectiveness of teaching and learning is determined in light of the adequacy of educational communication and communication channels. It is commonly used, which contributes to transmitting messages between them clearly and transparently (Amin et al., 2023)

Hassanein pointed out the necessity of providing a system that achieves effective communication and communication in the educational and pedagogical process, and that communication is an integral part of the principal's daily work program, and without it, the management and teaching process in the school will be weakened. As it is a necessary and necessary condition for the continuity of the school. Communication is considered one of the most important and prominent aspects of administrative work in all institutions in general, and educational institutions in particular (Rinata et al., 2022)

The researcher believes that effective communication among school principals is closely linked and effective, and has a direct impact on achieving job satisfaction among teachers in educational institutions, which reflects positively on their level of performance, raises their level of productivity, and increases their interest in work. Job satisfaction is the basis for achieving both psychological and social compatibility of the worker. In line with what Claypool (2019) stated, job satisfaction in the workplace leads to increased productivity, speed and accuracy of achievement, professional performance, and effective and enthusiastic participation in processes of change, improvement, and institutional development. Accordingly, the problem of the current research crystallizes in identifying the degree of influence of effective educational communication among secondary school principals on the level of job satisfaction among teachers in the Arab Republic of Egypt.

Research Problem

There is no doubt that the process of effective communication and communication is of great importance within educational institutions, as they actually represent the blood circulation in educational institutions, and therefore the success of these institutions and achieving their continuity depends on the effectiveness and continuity of this communication, and hence the provision of the elements of this communication and communication In an integrated manner within these institutions, it must be as integrated and interconnected as the human body.

(Mohammed et al., 2021). It is obvious that the weak mastery of communication skills by workers in educational institutions, especially those in leadership positions, will lead to failure in achieving their educational tasks that they are assigned to perform.

Many studies have focused on studying the issue of effective communication in the administrative process in general, including, for example, the study of Wardani et al (2021), which recommended the necessity of activating the communication process between workers within the organization, and with individuals and various relevant parties. Outside the institution, and the necessity of working to strengthen human relations between employees and management through the establishment of recreational and social activities, which help strengthen relations between them. Many studies have also emphasized the necessity of securing modern communication mechanisms and means; To keep pace with development and change, thus increasing the efficiency of the communication process and increasing its effectiveness. Practicing communication skills is as influential and effective as the extent and level of job satisfaction among employees, which appears through the level of their performance of their work tasks, the level of quality in performing these tasks, and also through their keenness to continuously develop their abilities and skills, and their devotion to the profession of education and work. Together with their bosses and leaders at work to improve the level of the educational process and achieve the goals that have been approved. Through the researcher's experience in the educational field, which extends for more than 25 years in working in schools and universities, most of the problems that are raised are related to the low level of motivation, motivation, satisfaction, and organizational loyalty, and that some teachers want to change their jobs and move to other jobs.

Research Questions

1. What is the level of effective educational communication between secondary school principals and teachers of general secondary education schools (governmental) in Dakahlia Governorate in the Arab Republic of Egypt?
2. What is the degree of job satisfaction among teachers of general secondary education schools (governmental) in the Dakahlia Governorate in the Arab Republic of Egypt?
3. Is there a direct effect of effective educational communication among secondary school principals on the job satisfaction of teachers in general secondary education schools (governmental) in Dakahlia Governorate in the Arab Republic of Egypt?

Research Objectives

1. To determine the level of effective educational communication between secondary school principals and teachers of general secondary education schools (governmental) in Dakahlia Governorate in the Arab Republic of Egypt?
2. To investigate the degree of job satisfaction among teachers of general secondary education schools (governmental) in the Dakahlia Governorate in the Arab Republic of Egypt?
3. To examine if there is a direct effect of effective educational communication among secondary school principals on the job satisfaction of teachers in general secondary education schools (governmental) in Dakahlia Governorate in the Arab Republic of Egypt?

Significance of the Research

The importance of the research can be summarized in the following points:

- Assisting officials in the Ministry of Education in identifying weaknesses in the communication skills of school principals, and working to develop remedial plans for them.
- Drawing the attention of officials in the Ministry of Education regarding holding conferences, seminars, workshops and training courses in the field of developing various types of communication skills for school principals in the Arab Republic of Egypt.
- Support the educational policy makers in the Ministry of Education in the Arab Republic of Egypt in enacting legislation and regulations to ensure the achievement of financial stability for teachers, which would raise their level of job satisfaction.

Theoretical Framework

Educational Communication Skills

Communication did not become a science in the strict sense of the word until a late period, specifically since the late forties, specifically in the year 1948 AD, by Claude Shannon, who was working as an engineer at Bell Telephones in the United States of America. He identified five elements of the communication process, which are: (Sender, receiver, message, symbols, and communication channel), and although they were developed for technical purposes, they have come to constitute the general framework for analyzing the communication process and its components in various fields. Therefore, there is agreement among scholars that communication is considered a major process in the life of society, and it falls within this The process is everything related to the transfer of ideas and information from one individual to another or one group to another, whether of a cultural, social, or scientific nature, and whether related to the people themselves, or the environment in which they live. (Yildiz, 2021, 143)

Hence, it becomes clear that the process of communication is a process as old as humanity, but it was not identified as a science until later, especially with the invention of telephones and the need to define the elements of communication. Since that time, communication began to be studied as a science, and interest in it began as a basic skill that affects our lives. It is considered a means of understanding between people, and communication is not limited to linguistic communication only, but communication takes many and varied forms and images, all of which people use in their daily life without realizing it, and it affects the relationship between people, and affects cooperation and understanding between them.

Strategies of Effective Communication

The means of communication may be direct between individuals and groups, or it may be indirect using automated methods. The sender who masters the process of sending messages chooses the appropriate means of communication, and tries to represent that means with other means in order to convey the message so that the recipient can understand it in its actual meaning, and one of the most important means of communication is What is effective is the following: (Schubel, 2014)

- Written media: such as books of various specializations and types, magazines, newspapers, and others.
- Direct oral means: that is, direct speech and speech between the sender and the receiver, such as the lecture that the teacher gives and delivers in his teaching

message, or direct conversation between one person and another regarding a point of view or idea that the sender aims to convey to the receiver.

- Audio-visual means: represented by audio-visual media (radio and television).
- Modern electronic means: include computer terminals, e-mail, and similar modern electronic channels and means (Baylor et al., 2019, 158)

It is clear from the above that effective communication has multiple means, including written, visual, audio, and electronic means, but electronic means of communication are the most important in the current era, as most people have begun to spend a large part of their lives on these means, and their impact today has gone beyond The impact of any other means, and therefore it must be paid attention to, monitored, supervised, and used optimally, especially in broadcasting moral messages.

There are differences between communication and effective communication, as communication benefits the initiative in establishing the relationship from one party, while effective communication benefits participation, and communication benefits sending a message from one party to another party, without receiving any response to this message from the recipient, while effective communication means Sharing and receiving a message, understanding it, and responding to it from the receiver (Abdul Khaleq, 2007, 26).

Al-Qadi and Hamdan (2010) believe that communication is a joint process whose goal is to transfer information with a specific purpose, from one person to another, and it requires a sender and receiver of the information. While (Al-Salama, 10, 2018) believes that effective communication is a process of sharing experience between two or more people until this experience is generalized and becomes common among them, which results in rearranging or shaping the previous perceptions and concepts of each of the parties involved in the communication process. It is a flexible process composed of several processes, integrated to achieve a specific goal. Effective communication requires both parties of communication to be familiar with effective skills that enable them to carry out the effective communication process efficiently. Hence, it becomes clear to the researcher that communication benefits the initiative of one person and does not require sharing with other people. Effective communication is through sharing with others, and communication is from a human or a machine. Effective communication is between two people or several people, so effective communication is employing... The process of communication in order to achieve certain goals, understand the message and respond to it, and respond to the thoughts and feelings required by the message. Effective communication includes the sender's ability to deliver the message to the receiver and the receiver's ability to understand the message and respond to it.

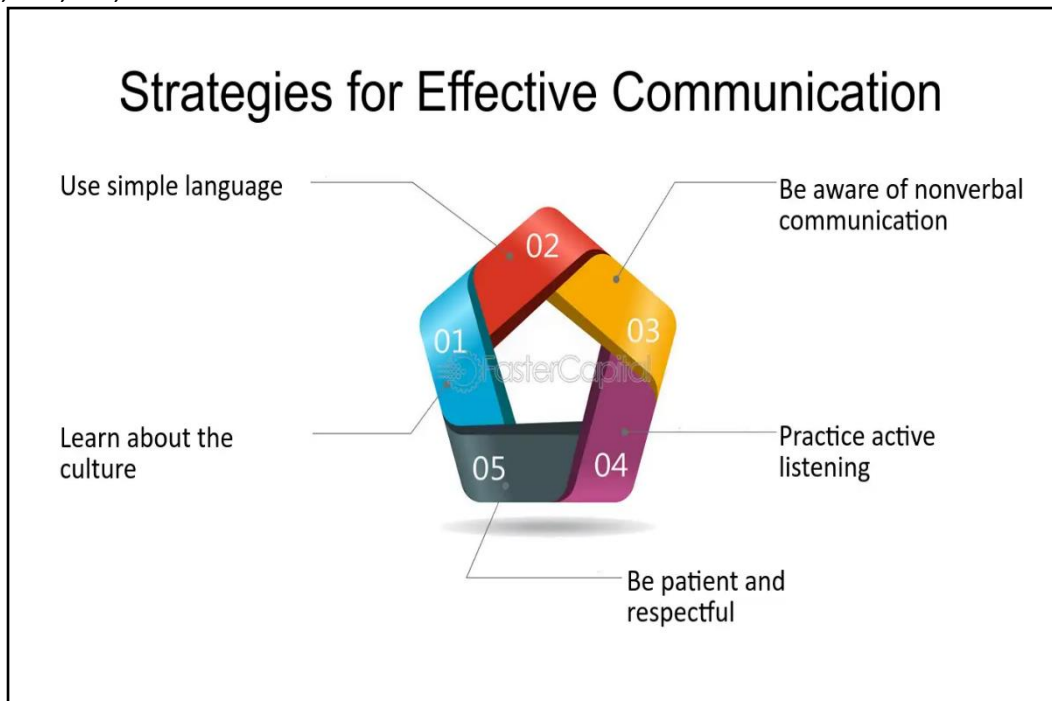


Figure: 1 Strategic for effective communication

In today's globalized world, educational institutions are expanding their operations globally, which means that they need to communicate with clients and partners from diverse cultural backgrounds. This can pose a challenge, as cultural differences can lead to misunderstandings and communication breakdowns. However, there are strategies that businesses can use to overcome cultural barriers and communicate effectively.

- **Learn about the culture:** The first step towards effective communication is to understand the cultural norms and values of the people you are communicating with. This includes everything from their language and communication style to their customs, beliefs, and values. For example, in some cultures, it is rude to make direct eye contact, while in others, it is a sign of respect.
- **Use simple language:** When communicating with people whose first language is not the same as yours, it is important to use simple, clear language that is easy to understand. Avoid using jargon, idioms, and metaphors that may not translate well into other languages.
- **Be aware of nonverbal communication:** Nonverbal communication, such as facial expressions, gestures, and body language, can vary widely across cultures. For example, a thumbs up sign may be seen as positive in some cultures but offensive in others. Being aware of these differences can help you avoid misunderstandings.
- **Practice active listening:** Active listening involves paying attention to what the other person is saying and asking clarifying questions to ensure that you have understood them correctly. This can be especially important when communicating with people from different cultures, as they may use different words or phrases to express themselves.
- **Be patient and respectful:** Effective communication across cultures requires patience and respect. Be willing to take the time to build relationships and understand the perspectives of others. Avoid making assumptions or judgments based on cultural stereotypes.

Overcoming cultural barriers is essential for effective communication in a globalized business environment. By learning about other cultures, using simple language, being aware of nonverbal communication, practicing active listening, and being patient and respectful.

Job Satisfaction

Job satisfaction is one of the most important terms that have appeared since the middle of the last century, as it has received wide attention and popularity since its inception in the field of human and social studies, which has become evident in the interest of researchers in studying the factors affecting it, in addition to studying its effects on various professional and life aspects of individuals, whether they are bosses or subordinates. . As a result, many explanations and definitions of job satisfaction have emerged from researchers and scholars in the field of humanities and social sciences based on their research objectives. However, there were common elements in most definitions of job satisfaction, represented by the common feelings and feelings of individuals working in the organizations in which they work.

Therefore, if organizations want to take the maximum benefit from working human resources, they must study and achieve job satisfaction, so that human behaviour is determined by three factors: the cause of the behaviour that originated, the behaviour that is accompanied by the goal that the individual seeks, and the driving force that faces this behaviour after it is provoked and contributes to it. It is directed to achieving the goal, and motivation is considered a tool of satisfaction, and accordingly, competent organizations must make additional efforts to develop and improve the performance of employees by achieving job satisfaction, which is an important factor in reaching this goal (Zuelf, 2003). There are many definitions that attempt to clarify the concept of job satisfaction for the individual worker and determine its relationship to increasing productivity by trying to know the degree of the individual's satisfaction with his job and the organization in which he works.

Among the definitions that dealt with job satisfaction, for example, is what Locke stated that job satisfaction is a pleasant or positive emotional state resulting from job evaluation or job experience (Locke, 1976). Al-Mishaan (1993) defined it as the degree to which an individual achieves the satisfaction of his needs, and this occurs through several factors, some of which are external, such as the work environment, and internal, such as the work that the individual does himself, which leads to his satisfaction and makes him desire it, accepting it without complaining, and achieving his ambitions, desires, and professional inclinations.

Herbert defined it as the feelings of individuals towards their work, and these feelings can be defined from two angles: what work provides for workers in reality, and what work should provide from their point of view. Vroom also defined it as a positive attitude on the part of the individual towards his work. Leroy (2019); Al-Ghailaniyya (2015) defines it as the school principal's acceptance of his work as a result of his being influenced by a group of material, moral, and psychological variables surrounding him in the work environment.

Dimensions of Job Satisfaction

The researcher conducted a survey of the most important studies and scientific research that dealt with the dimensions and factors affecting the degree of job satisfaction. Through study and analysis, it was found that there is almost agreement among researchers about these dimensions, which can negatively or positively affect the job satisfaction of employees, and

which contribute directly and indirectly. In creating job satisfaction and determining its extent, the most important of these dimensions are the following

Wages and Salaries

The wage that the worker receives is an important means of satisfying the material and social needs of individuals. Many studies have indicated that there is a strong, positive relationship between the level of income and satisfaction with work. An increase in an individual's income is accompanied by an increase in job satisfaction, such as the study (Abu El-Enein, 2017), and the study (Al-Saudi, 2013) Their results concluded that the higher the level of income of individuals, the higher their satisfaction with work and vice versa, and material rewards and incentives contribute to raising the level of job satisfaction among workers.

Anyone who contemplates the impact of the material aspect on the individual and on society is clear in the development of the individual's personality, due to the concept of wages being linked to the social aspects. The more the individual's wage increases, the more he feels its psychological impact on him because he is part of the economic aspect influencing the social aspect in society. It is one of the basic elements that the individual is keen to achieve. It is worth noting that Herzberg contradicted this opinion in his theory when he affirmed that reward is one of the minimum needs that does not lead to satisfaction, but only prevents dissatisfaction. This opinion has some drawbacks, including:

Individuals differ in the degree to which they evaluate needs, and society affects the needs of individuals. The importance of wages under the capitalist system is more prominent than in developing countries due to the importance of economic factors in the lives of individuals in the capitalist system. Wages are one of the motivators for various needs other than economic needs, such as the need for excellence, success, and excellence (Najm & El-Sherbiny, 2014)

Opportunities for Promotion and Incentives

Promotion and incentives are a group of external influences, and they have a clear role in the individual's internal motivations, which in turn direct his human behavior in satisfying his needs and desires. Promotion is the transfer of an employee from a lower job level to a higher level, where the effect of the promotion depends on the extent to which the employee expects it. Obtaining a promotion Unexpected events increase his job satisfaction and vice versa. When he expects more than what he gets, it results in more dissatisfaction and thus less job satisfaction (Flayh et al., 2005). Also, when promotions are given fairly and consistent with expectations, this leads to employees' satisfaction with their work (Al-Ajmi, 2017). Incentives have an impact on stimulating the mobility of employees, which motivates their behavior to perform their work diligently and sincerely. The more they are compatible with their needs and desires, the organizational climate becomes appropriate and compatible with their requirements (Issa, 2014).

There is also a relationship between satisfaction with opportunities for major promotions and satisfaction with wages. Obtaining a promotion is associated with an increase in wages, and it is the result of the dedication and effort expended at work by the individual. It is an acknowledgment of this by management. It also provides opportunities to develop the capabilities of employees, and thus job satisfaction. It is linked to the availability of promotion opportunities, but this does not mean that all employees seek promotions, as the desire for them varies from one individual to another. Some move between organizations to find more and greater promotions, and there are those who seek to obtain a feeling of security and

comfort in the job, but what is certain is that the majority seek to obtain On promotion (Al-Hashemi and Murad, 2013), and with regard to incentives, their importance is highlighted because of their role in creating a positive climate that helps increase effectiveness and productivity in the organization if they are applied fairly among employees, but if they are the opposite, personal desires intervene or there are no standards. Or conditions that link it to achieving the organization's goals, as this leads to the creation of a bad climate, the result of which is pressure on the brilliant and distinguished people in the work environment (Saleh, 2019).

Work Content and Type of Tasks

The content of the work and the responsibility and variety of tasks it includes are important to the individual, as the individual feels important when he is given powers to complete his work, so his level of satisfaction with work increases. This is consistent with Herzberg's theory regarding motivational factors and its applications of job enrichment.

Individuals with higher needs want to be granted independence and provide some other elements of job enrichment, such as feedback and the assignment of various tasks. Therefore, satisfying this desire through job redesign often leads to raising their satisfaction rates. (Abbas, 2003)

Supervision and Management

Many studies have confirmed that the style adopted by the boss for supervision may affect the level of satisfaction among his subordinates. The supervisor's development of personal relationships between him and his employees, understanding of the difficulties they face, and tolerance for mistakes will increase their loyalty and level of job satisfaction, while when the supervisor uses... His subordinates as a means to achieve his production goals, which will cause him to lose their loyalty and will have a negative reaction to their level of satisfaction with work (Ahmed, 2017)

Supervision is similar to management in that there is a follower who is influenced by the leadership of the follower. There are styles of leadership within anarchic, authoritarian, and democratic organizations, and one of the best styles and the one that most achieves employee satisfaction is the democratic style, which includes freedom of opinion, equal opportunities, justice and equality before the law, cooperation, and brotherhood. Etc., but it is important to know the personality of the subordinate, as it determines the type of supervision that will be affected by him (Al-Hashemi and Murad, 2013).

The Nature and Conditions of Work

These are the factors that are related to the physical or natural working conditions within the organization. The physical working conditions, such as ventilation, lighting, heat, humidity, and noise, affect the individual's degree of acceptance of the work environment, as well as the availability of the Internet, which has become the Ministry of Education in the Republic of Egypt.

Abraham Maslow's theory of needs (Abraham Maslow, 1954)

In 1954, Abraham Maslow presented his theory known as the Hierarchy of Needs Theory, which focuses on the fact that a person has multiple needs, and that the needs that have not yet been satisfied are the ones that influence behaviour, while the needs that have been satisfied do not constitute the individual's motivation, and that there is an order. of human

needs, and that whenever one of these needs is satisfied, the individual moves to the next unsatisfied one in the hierarchical organization of the hierarchy of needs. Maslow classified this need into five

levels according to its relative importance: physiological needs, security needs, social needs, esteem needs, and self-actualization needs. Maslow's theory of the hierarchy of needs is one of the best theories that covered human needs. It was presented by Abraham Maslow, as some call it the "hierarchy of needs theory." Maslow divided human needs into five categories that are organized in a hierarchy where the person begins to satisfy them. His lower needs, then those that are higher, and so on (Al-Shahoumi, 2020). The Maslow theory is as follow:

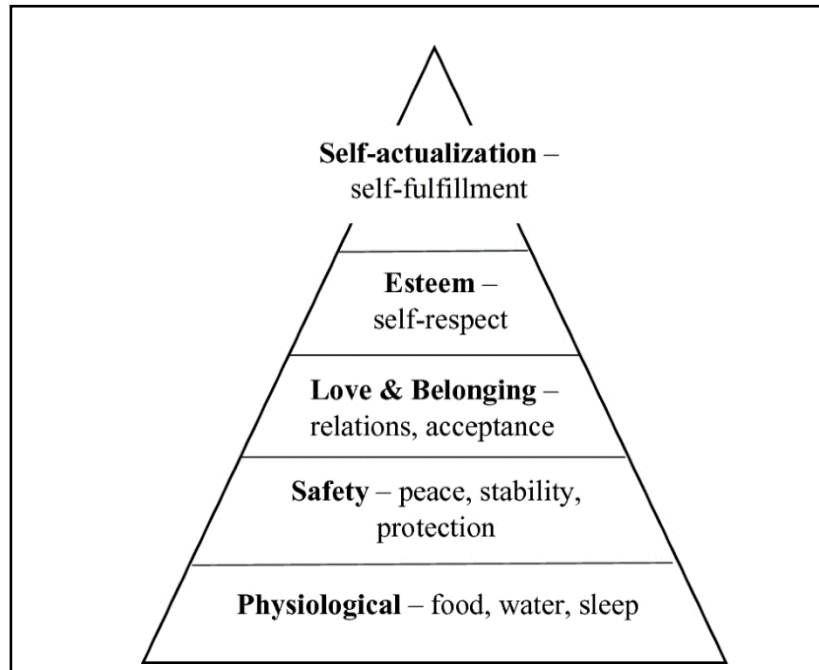


Figure 2: Maslow hierarchy of needs theory

Maslow postulated that there were several prerequisites to meeting these needs. For example, having freedom of speech and freedom of expression or living in a just and fair society aren't specifically mentioned within the hierarchy of needs, but Maslow believed that having these things makes it easier for people to achieve their needs.

In addition to these needs, Maslow also believed that we have a need to learn new information and to better understand the world around us. This is partially because learning more about our environment helps us meet our other needs; for example, learning more about the world can help us feel safer, and developing a better understanding of a topic one is passionate about can contribute to self-actualization. However, Maslow also believed that this call to understand the world around us is an innate need as well.

Although Maslow presented his needs in a hierarchy, he also acknowledged that meeting each need is not an all-or-nothing phenomenon. Consequently, people don't need to completely satisfy one need in order for the next need in the hierarchy to emerge. Maslow suggests that, at any given time, most people tend to have each of their needs partly met—and that needs lower on the hierarchy are typically the ones that people have made the most progress towards.

Additionally, Maslow pointed out that one behaviour might meet two or more needs. For example, sharing a meal with someone meets the physiological need for food, but it might

also meet the need of belonging. Similarly, working as a paid caregiver would provide someone with income (which allows them to pay for food and shelter), but can also provide them a sense of social connection and fulfilment.

Literature Review

Educational Communication on the Job Satisfaction of Teachers

Al-Farsi's study (2023) aimed to test the effect of the supervisory mediator on the relationship between effective communication of school principals on the motivation and organizational loyalty of teachers in the Sultanate of Oman. The researcher used the descriptive analytical method in a quantitative manner, and applied a questionnaire consisting of (78) items distributed over four variables, which are: Effective communication, motivation, organizational loyalty, educational supervision), on a stratified random sample of (380) male and female teachers in three educational governorates (Al-Dhahirah - Muscat - Al-Buraimi), and (353) questionnaires valid for statistical analysis using structural equation modeling (SEM) were retrieved. And confirmatory factor analysis (CFA) with the (AMOS) and (SPSS) programs.

The results revealed high levels of the research variables from the perspective of his sample, and showed a direct positive effect of effective communication on all other variables, and a direct positive effect of educational supervision on motivation and organizational loyalty. The degree of the two effects ranged Between high and medium, there is a weak positive effect of educational supervision on the relationship between effective communication and motivation, as well as on the relationship between effective communication and organizational loyalty. Therefore, the researcher recommended developing the practice of educational supervision among basic education teachers in the Sultanate of Oman, overcoming the challenges that hinder the educational process, and helping teachers. In solving the problems, they face in the work environment regarding communication and weak achievement motivation and commitment, while activating the peer guidance method among educational supervisors, and responding to teachers' viewpoints and constructive criticism in developing educational supervision methods, in addition to developing their effective communication skills and achievement motivation.

The study Wardani et al (2021) dealt with revealing the role of academic supervision and interpersonal communication in improving teacher performance in public primary schools in the administrative city of South Jakarta. This study used a survey method with path analysis techniques and a causal quantitative approach. The sample in this study was 81 teachers who were taken using a simple random sampling method, and the teachers who were the target of the research were identified. The data analysis technique was performed using descriptive and inferential statistics by first conducting prerequisite analysis, i.e. sample normality analysis and regression analysis. The results of the study showed that academic supervision activities and effective communication between individuals have a major role in improving teacher performance, which was high. Professional teachers are able to manage learning activities well and are able to provide motivation for students to achieve learning goals and produce students who excel in their fields of specialization.

The Al-Sabtiyya study (2020) aimed to reveal the reality of administrative communication prevailing in the Ministry of Education in the Sultanate of Oman, and to know the size of the communication gap between the units of the Ministry, its causes and its impact on achievement in the Ministry of Education, and to develop a proposed vision to limit or reduce the administrative communication gap between units of the Ministry. Different education and education. In order to achieve the objectives of the study, two tools were used:

A questionnaire consisting of (11) items, on a sample of (463) employees in the General Office of the Ministry and nine educational governorates, and an interview on a sample of eight general directors in the General Office of the Ministry and the governorates. The sample members' estimates of the study's axes (the nature of prevailing administrative communication, the causes of the communication gap, and the impact of the communication gap on achievement) were between high and medium, and there is a similarity between the study sample's responses to the two tools (the questionnaire and the interview), in most dimensions of the study's axes, and in light of the results. The proposal of the Communication and Communications Unit was developed to limit or reduce the administrative communication gap between the various units of the Ministry of Education, and the study came out with several recommendations that it is hoped will contribute to the effectiveness of the administrative communication system in the Ministry of Education in the Sultanate of Oman.

Job Satisfaction of Teachers

Among the studies that confirmed and addressed job satisfaction is the study by Al-Taie (2022), which aimed to examine the level of job satisfaction of employees in an educational institution (the University of Baghdad as a model) and its relationship to the degree of their organizational loyalty in light of the Covid-19 pandemic, relying on the knowledge generated by reviewing the literature that was used. To determine the main factors that affect employee satisfaction and thus the degree of loyalty to his organization, and the foundational idea that employee satisfaction affects the level of overall performance of the organization is based on several factors, including the degree of employee loyalty and dedication to work, and therefore maintaining an appropriate level of employee job satisfaction is one of the main factors in maintaining the effective organizational performance of any organization. In light of the changes that have occurred in the organization's methods and procedures in light of the Covid-19 pandemic, it has become important to unveil the positive and negative effective factors that affected employees' job satisfaction and then their organizational loyalty to achieve greater from organizational progress and improvement and then improving the overall performance of the organization. A questionnaire was developed to determine job satisfaction and organizational loyalty at the career level for employees of the educational institution, University of Baghdad in light of the Covid-19 pandemic. The study included (279) employees from the Colleges of Education for Girls and the College of Science for Girls, with a rate of (135), (144) employees respectively. Whereas employee satisfaction was considered an independent variable, and organizational loyalty was considered a dependent variable. Reliability tests and regression analysis were conducted to prove the research hypotheses, and the research results showed that satisfied employees tend to be more loyal and dedicated to the organization and contribute positively to improving organizational performance. Moreover, at the time of the Covid-19 pandemic, employees in the field of educational services at the university had positive job satisfaction and loyalty.

Sande's (2022) study also sought to investigate the factors that influence the job satisfaction levels of teachers in public secondary schools in Kilifi County, Kenya. The study aimed to investigate the effect of promotion on the job satisfaction levels of teachers in public secondary schools in Kilifi County; To examine the extent to which situational factors influence teachers' job satisfaction levels; To determine the impact of management and supervision by the administration on the levels of job satisfaction of teachers and to determine the impact of training and development on the levels of job satisfaction of

teachers. The study was guided by the two-factor theory of motivation developed by Frederick Herzberg. A descriptive survey design was used to address the problem statement and research questions. The questionnaire was relied upon as a tool to collect information from teachers within Kilifi County. Using stratified sampling technique, 38 schools were selected out of a total of 107 public secondary schools in Kilifi County. A five-point Likert scale was used, and the study sample included (418) teachers who were selected randomly. The data was analyzed using descriptive statistics that included frequencies and percentages provided by the Statistical Package for the Social Sciences (SPSS). The results of the study showed teachers' satisfaction with Training and development factor ($M = 3.2$). Promotion ($M = 2.3$) recorded the lowest mean among respondents. Teachers were slightly satisfied with the working conditions factors ($M=2.5$). Teachers were slightly satisfied with the job and supervision factor ($M=2.6$). Overall job satisfaction indicated that (60.95%) of the teachers were slightly satisfied with their jobs ($M = 2.3$). Regression analysis and ANOVA showed that there was a perfect strong positive relationship between the independent variables and the dependent variable.

Subarto et al (2021) study also aimed to study the positive effects of leadership style, work environment, and organizational climate on lecturer performance through job satisfaction at Pamulang University. The researchers used the quantitative research method in this study. Data were collected using questionnaires distributed through surveys. Proportional random sampling was used, and (135) valid questionnaires were obtained for the final analysis. Partial Least Squares (PLS) was used for statistical analysis. The results showed that leadership style, work environment, and organizational atmosphere also affect the performance of lecturers. Thus, it has been proven that job satisfaction mediates the relationship between leadership style, work environment, organizational climate, and lecturer performance.

The study by Phuong and Vinh (2020) also sought to provide a deeper understanding of the relationships between job satisfaction, employee loyalty, and job performance, and the impact of job positions as a mediator on these relationships. This study combined the theoretical framework from previous research to derive a conceptual model to explain this phenomenon. The research applied structural equation modeling (SEM) and multi-group analysis to test four hypotheses, with data from 315 employees in accommodation institutions in Danang, Vietnam. Experimental results showed that job satisfaction has a direct positive effect on employee loyalty and job performance, and that employee loyalty positively affects job performance, and the effect on the relationship between job satisfaction and employee loyalty varies depending on the job.

Al-Shahoumi's (2020) study also aimed to test the effect of organizational similarity as a mediating variable in the relationship between job satisfaction and organizational commitment from the point of view of basic education school teachers in the Sultanate of Oman. The researcher used the descriptive survey method, used the holistic method, and used the questionnaire. He distributed it in seven governorates on a random stratified sample and conducted a statistical analysis. The results of the study revealed a direct effect of job satisfaction on organizational commitment and symmetry, and a direct effect of organizational symmetry on organizational commitment, and that organizational symmetry has an overall mediating role in the relationship between job satisfaction and organizational commitment. Thus the current study instigates the effective educational communication on the job satisfaction of teachers among public secondary school principals in the Arab republic of Egypt.

Research Methodology

Since this research is related to studying the role of effective communication for secondary education school principals on the job satisfaction of teachers in the Arab Republic of Egypt, and accordingly, the research method most appropriate to the nature of the research problem is the quantitative method, and this type of research method is considered appropriate for generalizing the results through verification, as the studies were surveyed. Research and references related to research variables.

Study Population

The original research community consists of all male and female teachers in general secondary education schools (governmental) in Dakahlia Governorate in the Arab Republic of Egypt during the academic year (2022-2023), and their number reached (5428) male and female teachers, including (2987) male and (2441) female teachers. Distributed among (163) government schools in Dakahlia Governorate, based on statistics from the General Administration of Central Databases affiliated with the Ministry of Education and Technical Education for the academic year (2022-2023). The researcher chose Dakahlia Governorate due to the geographical diversity that characterizes it, and it is also considered It is one of the largest governorates in terms of area and population, and it has a large number of educational departments, amounting to 17 educational departments. This allows the research results to be generalized to all governorates of the Republic, as it is difficult to choose other governorates due to the difficulty of focusing on the process of applying the questionnaire and distributing it to all governorates of the Republic.

Sample and Sampling Procedure

A sample is a segment of society that is selected in an appropriate manner and size with the aim of generalizing the results to society. In the context of selecting the sample for the current research, Kline (2015) explained that a large sample size is required when using structural equation modelling (SEM) as the primary method for collecting and analyzing data. Accordingly, the Steven K. Thompson equation was used to determine the sample size $n = 5428 \times 0.50 (1 - 0.50) \div [(5428 - 1 \times (0.0025 \div 3.8416))] + 0.05 (1 - 0.05) = 359$

Sample size = 359 male and female teachers

According to the nature of the current research population to achieving its objectives, the researcher will use a stratified random sample due to the presence of two layers of the research community (teachers - female teachers). The random sample was also chosen because the current research relies in analyzing its data on structural equation modelling (SEM), which requires a better representation of the population. The table below indicates the sample size of the study:

Table 1
Sample size calculation

Type	Male Teachers	Female Teacher	Total
Total	2987	2441	5428
percentage	%55.03	%44.97	%10
Calculated sample size	198	161	359

It is clear from table (3) that the minimum sample size in this research is (359) from the total research community of (5428) teachers and teachers in secondary schools (government) in the governorate of Al-Daqahlia, and a proportion of (6.61%) from the original community for the research, where it reached the size of the research sample for the teachers (198) while the number of the research sample from the teachers reached (161), so this number is suitable to represent the characteristics of the original population. The stratified method was used to choose the sample representatives across the study population.

Instrument of the Research

The research relied on the questionnaire to collect data from the sample size. This it is one of the most widespread and used research tools in the human, social, and psychological sciences, and is characterized by being free from bias. This is done by tightening and controlling it using objective and scientific methods, when collecting, analyzing, and stating and explaining the results. Therefore, the questionnaire tool is suitable for testing the research hypotheses and questions, which are to find out the effect of effective communication for public secondary school principals on achieving job satisfaction for teachers. In order to verify the validity and reliability of the instrument, the researcher collected a survey sample and applied the research tool to ensure its stability according to the Cronbach Alpha coefficient, by distributing (63) questionnaires to the number of teachers in the educational departments of Al-Dakahlia Governorate in a random way from outside the research sample The basis on which the research will be applied, and it has been taken into account to test the accuracy, and to ensure the stability of the tool in each axis of the research, the researcher used the Cronbach's alpha coefficient to measure the stability of the internal consistency, and the stability results were all using Cronbach's alpha higher than the recommended value (0.7), and it is clear From table (7) that the value of the general reliability coefficients for the research axis and its dimensions is (0.850), and its dimensions and terms range between (0.7) and (0.9) for the whole tool, this indicates that the reliability is characterized by a high degree of stability, and therefore it can be relied on in the field application for research accordingly. The below table shows the reliability test of the instrument

Research axes	Dimensions	Cronbach Alpha
Effective communication skills	The thinking skill of the school principal	0.789
	The reading skill of the school principal	0.847
	The writing skill of the school principal	0.849
	The speaking skill of the school principal	0.839
	The listening skill of the school principal	0.915
	Satisfaction with work tasks and duties	0.881

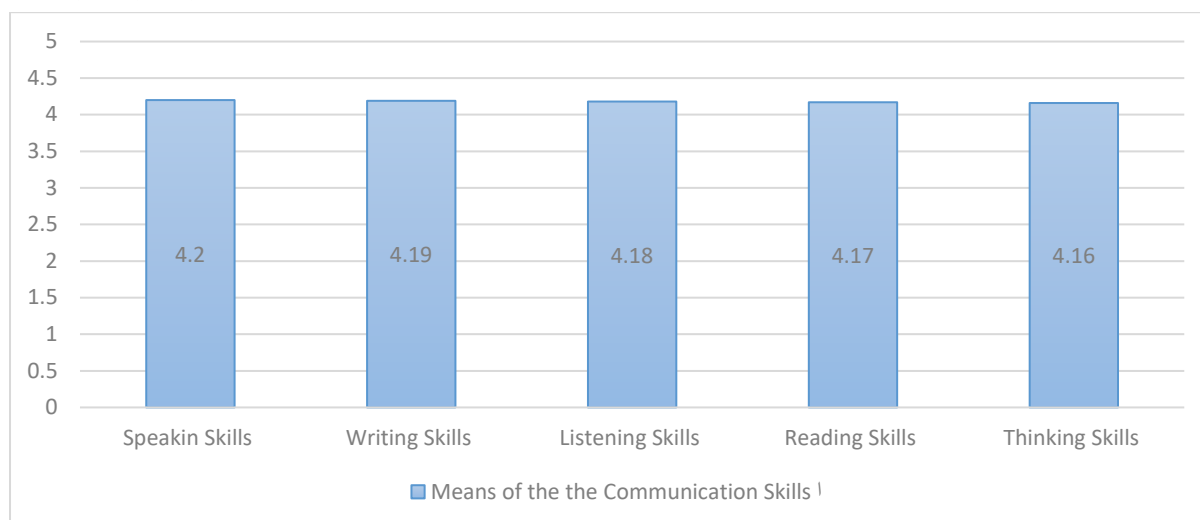
Job Satisfaction	Satisfaction with relationships with colleagues and superiors	0.835
	Satisfaction with respect and appreciation	0.921
	Satisfaction with working conditions and job stability	0.782
	Satisfaction with training qualification and career advancement	0.794
	Satisfaction with salary, bonuses and incentives	0.902
Total		0.850

Results of the study

To achieve the research objectives and to analyse the data collected from the members of the research sample; The researcher used a number of appropriate statistical methods, which determined the research objectives, answered the questions, and verified the hypothesis, using statistical analysis programs such as (SPSS) and (AMOS) programs, suitable for the nature of the research. To analyse the first research question which sought to explore the degree of effective educational communication between secondary school principals and secondary school teachers (government) in the governorate of Al-Daqahlia in the Arab Republic of Egypt, the descriptive statistic was used and analysed through calculation of Means and Standard Deviation. The table 2: below shows the result of the first research question

the level	Ranking	standard deviation	Arithmetic mean	The dimension	variable
OK	1	0.33	4.20	The speaking skill of the school principal	Effective communication skills
OK	2	0.34	4.19	The writing skill of the school principal	
OK	3	0.29	4.18	The listening skill of the school principal	
OK	4	0.35	4.17	The reading skill of the school principal	
OK	5	0.34	4.16	The thinking skill of the school principal	
		0.33	4.18	The general average of the effective educational communication variable	

The data obtained for the first research question is also displayed in the following chart :



The results in Table (8) and Figure. (3) indicate that the level of the variable of effective educational communication skills was high for all dimensions, as the value of the arithmetic mean was equal to (4.18) for the five dimensions, and the highest value was for the skill (speaking with the school principal) with an average of (4.20) I ranked first, followed by the skill (Writing with the school principal) with an average of (4.19) with which it ranked second, while the skill (Listening with the school principal) ranked third with an average of (4.18), and the lowest value for my skill was (4.20). Reading according to the school principal) and (Thinking according to the school principal) ranked fourth and fifth, with an arithmetic average of (4.17) and (4.16), respectively. The overall average for the effective educational communication variable was (4.18).

To answer the second research question, the researcher used a descriptive statistic for degree of job satisfaction among teachers of general secondary education schools (governmental) in the Dakahlia Governorate in the Arab Republic of Egypt. The result is shown in the following:

Table: 2

Mean and Standard Deviation of the descriptive statistics

Level	Ranking	standard deviation	Arithmetic mean	The dimension	variable
OK	1	0.67	3.85	Satisfaction with work tasks and duties	Job Satisfaction
OK	2	0.77	3.65	Satisfaction with relationships with colleagues and superiors	
OK	3	0.77	3.63	Satisfaction with respect and appreciation	
neutral	4	0.72	3.39	Satisfaction with working conditions and job stability	
neutral	5	0.78	3.35	Satisfaction with training, qualification and career advancement	

neutral	6	0.77	2.96	,Satisfaction with salary bonuses and incentives
		0.75	3.48	The general average of the job satisfaction variable



The results in Table (9) and figure (3) indicate that the level of the job satisfaction variable ranged between (Agree) and (Neutral). Where the highest degree of agreement came for the dimension (Satisfaction with work tasks and duties) with an arithmetic average of (3.85). It was ranked first, followed by the dimension (satisfaction with relationships with colleagues and superiors) with an average of (3.65), which ranked second, then the dimension (satisfaction with respect and appreciation) came in third place) with an arithmetic average of (3.63), and the lowest degree of approval came for the dimension (Satisfaction with working conditions and job stability) and (Satisfaction with training, qualification, and career advancement) respectively, with arithmetic averages of (3.39) and (3.35), which indicate a moderate degree of agreement in which they ranked fourth and fifth, respectively, in solving the (satisfaction with Salary, incentives and bonuses) ranked last, with an average of (2.96). The overall average for the effective job satisfaction variable was (3.48).

The last question was results of the path analysis between the effective educational communication variable and the job satisfaction variable. To study the effect of effective educational communication among secondary school principals on the job satisfaction of teachers in general secondary education schools (governmental) in the Dakahlia Governorate in the Arab Republic of Egypt, the researcher developed a structural model between the effective educational communication variable (independent variable) and the job satisfaction variable (dependent variable), and the figure and table are The following two explain the results reached

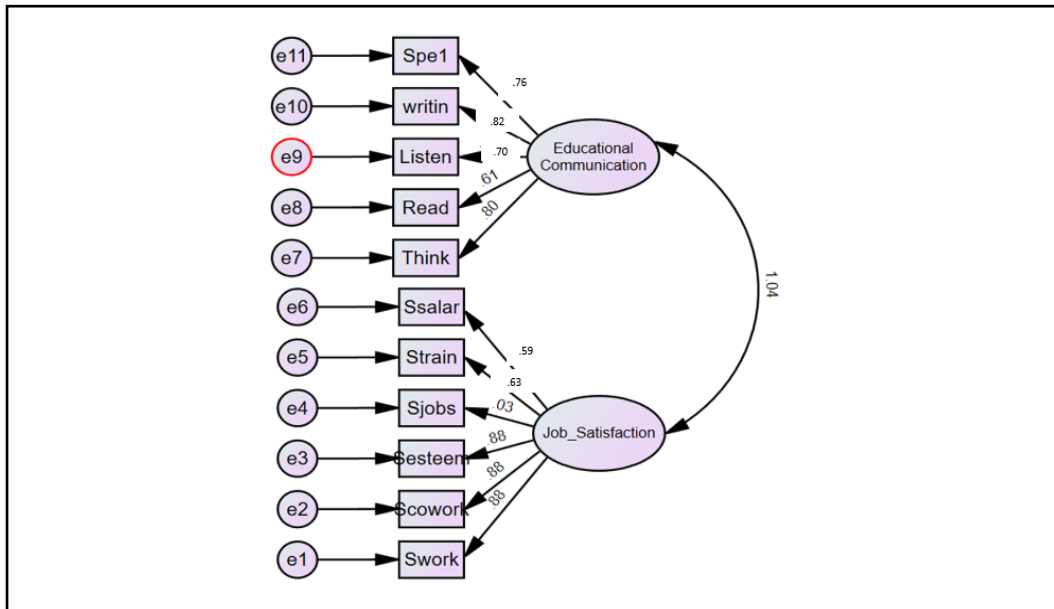


Figure shows the result Results of the path analysis between the effective educational communication variable and the job satisfaction variable. Table below Indicators of the structural model for analyzing the path between the educational communication variable and the job satisfaction variable. Finding indicators are shown in

Decision	Indicator value	Indicators Name	Code of Indicators	
			cmin	df
	43.840	Chi squared		
	17	Degrees of freedom		
	0.001	Significance level		
Accepted	2.530	Standardized chi-square	F/CM	
Accepted	0.066	Root mean square error of estimation	RMSEA	
Accepted	0.988	Matching quality Comparative	CFI	
Accepted	0.970	fit index	GFI	
Accepted	0.987	Incremental matching index	IFI	
Accepted	0.938	fit index the average	AGFI	
Accepted	0.003	Root mean remainder	RMR	
Accepted	0.979	Conformity index Standard	NFI	
Accepted	0.979	Non-standard conformity index	TLI	
Accepted	0.965	Relative conformity index	RFI	

It is clear from figure 3 and table that the indicators are consistent with accepted statistical standards. Accordingly, the proposed model for the relationship between each of the variables of effective educational communication and job satisfaction is a good model, and then the structural model for the relationship between the variables is accepted. Effective

communication and the variable job satisfaction. To determine the effect of the variable of effective communication skills on the variable of job satisfaction among teachers. Table below shows the results of linear regression analysis to determine the extent of the impact of the educational communication variable on the job satisfaction variable among teachers

Correlation coefficients		Independent variable	Analysis of variance		Regression model			Dependent variable
Sig.	T Calculated		Sig. Significance level	Calculated value	The specified coefficient of determination	The coefficient of determination	Link	
0.00	18.046	Effective Communication	0.00	324.0609	0.481	0.482	0.695	Job Satisfaction
	0.746							

It is clear from Table (11) that there is a high, positive, statistically significant effect of the effective educational communication variable on the job satisfaction variable among teachers, as the value of the regression coefficient was equal to (0.746), while the correlation coefficient was (0.695), which indicates the existence of a strong, positive relationship between the two variables. While the value of the adjusted coefficient of determination was (0.481), which indicates that (48%) of the change in job satisfaction is due to the effective communication variable, and the calculated (t) value was higher than the tabulated (t) value, as The calculated value of (t) was (18.046) while its tabulated value was (1.96). The level of significance was (0.00), which is smaller than the level of significance (0.005), which indicates the significance of the model. Therefore, the hypothesis can be accepted that states: "There is a direct, statistically significant positive effect of effective educational communication on job satisfaction among secondary school teachers in the Arab Republic of Egypt."

Discussion and Recommendations

The results of the current study indicated that the job satisfaction is predicted with the level of effective communication in the organization. This is in line with previous Qashqosh’s study (2020) aimed to know the degree to which primary school principals within the Green Line practice effective communication skills and their relationship to teachers’ motivation from the point of view of the counsellors and teachers themselves. The study applied the descriptive correlational approach, applied questionnaires as a tool for the study, and was applied to a stratified sample consisting of (370) counselors and teachers. The results showed that the degree to which primary school principals within the Green Line practice effective communication skills from the point of view of the counselors and teachers themselves was at a high level, and there is a relationship Positive and statistically significant between the degree of primary school principals’ practice within the green line from the point of view of counselors and teachers.

Furthermore, the finding confirmed the study conducted by Cesar Yilmaz's study (Balat, Sezer, Bayindir & Yilmaz 2019) aimed to reveal the relationship between self-esteem, despair, and communication skills, taking self-esteem as an intermediary variable. The research designed in the survey form was conducted with a sample of pre-school teachers, and the research group includes (305) candidate teachers who developed a research. According to the results of the research, teachers' self-esteem is negatively related to their level of despair and positively related to their communication skills, and the relationship is negative between their level of despair and skills. Communication, and according to the results of the regression analysis, despair and self-esteem explain 31.6% of the communication skill. In addition, there is another very important result of the regression analysis; Teachers' self-esteem plays a fully mediating role in the relationship between their level of hopelessness and their communication skills, and the implications of the findings are discussed in light of the relevant literature.

Research Recommendation

In light of the findings of the research, the researcher recommends the following

1. Ensuring the holding of training courses that help enhance the level of effective communication skills, especially training courses in the field of developing both thinking and reading skills for principals of secondary schools (government) in the .Arab Republic of Egypt
2. It is necessary to work on employing modern technological technologies such as e-mail and digital platforms, which help facilitate the effective communication process .between the principal and teachers
3. Adopting personal interviews between the principal and the teacher as an additional method with the aim of identifying the factors that can affect the level of satisfaction .among teachers and working to correct them
4. It is necessary to work to raise salaries, bonuses and incentives for teachers, in order to achieve psychological stability for them, and thus increase the level of job .satisfaction and increase motivation and enthusiasm at work
5. Adopting a number of educational policies that work to support effective .communication and achieve job satisfaction among teachers in secondary schools
6. Conducting studies that address the relationship between effective communication among school principals and its impact on the level of motivation and organizational .affiliation among teachers

Conclusion

This research expounds the effect of effective educational communication among public secondary school principals (government) on job satisfaction among teachers in Dakahlia Governorate in the Arab Republic of Egypt. The researcher used the quantitative method; Due to its suitability to the nature of the research problem, the research community included all teachers in general secondary education schools (governmental) in Dakahlia Governorate, and their number is (5428) male and female teachers distributed among (17) educational departments. The researcher used the questionnaire as a tool to collect data from the research sample, which consisted of It consists of three parts that included a number of skills and dimensions, and the number of paragraphs reached (64), where the first part included personal data and demographic variables, while the second part included (28) paragraphs distributed unevenly over five axes that address the effective communication skills of school

principals. While the third part included (35) items distributed unevenly along six axes that measured the dimensions of job satisfaction among teachers. After verifying the validity and reliability of the questionnaire, it was distributed to a random sample of (359) male and female teachers in general secondary education schools (governmental) In Dakahlia Governorate, distributed among educational administrations in four educational administrations, from which the researcher retrieved (347) questionnaires suitable for statistical analysis, using descriptive statistical analysis programs such as arithmetic averages, in order to determine On the responses and the extent to which they were high or low in each item in the questionnaire axes, and standard deviations were calculated in order to determine the variation in responses to each item in the questionnaire axes. Inferential methods were also used such as: employing the Cronbach alpha coefficient to verify the stability of the research tool (the questionnaire). The researcher used structural equation modelling (SEM), and path analysis using (AMOS) and (SPSS) programs, and confirmatory factor analysis (CFA). The results of the research revealed that there are high levels of agreement among members of the research sample for the effective communication skills of secondary school principals, for each of the skills: speaking, writing, listening, reading, and thinking, respectively. The results also revealed that there was a discrepancy in the responses of the research sample in terms of the degree of agreement with the dimensions of job satisfaction, as their response came in the level of agreement with the dimensions satisfaction with work tasks and duties, satisfaction with relationships with colleagues and superiors, satisfaction with respect and appreciation and came neutral for the dimensions satisfaction with Working conditions, job stability, satisfaction with training, qualification and career advancement, and satisfaction with salary, rewards and incentives The results also revealed a direct, statistically significant positive effect of effective educational communication on job satisfaction among secondary school teachers in the Arab Republic of Egypt.

This research contributes to the model of effective communication and teachers' job satisfactions in Egypt. The study paves the way for the educational decision making and the ministry of education in Egypt to recommend and training the teachers on the modern communication ways such as (e-mail, Webex, Zoom meeting and others) in replacement of the conventional approaches employ by the school authority. Furthermore, the finding of this study has contributed the theories of job satisfaction and the effective communication which have been the dependent and independent variables of the current study. These findings highlighted that Job satisfaction of teachers is essential for continuing growth of education system around the world, in which teachers are crucial element of educational opportunity, structure and success. This can only be achieved through the effective communication. Communication theories should be more emphasised in the working environment and the job satisfaction of the teacher. These findings complement the Herzberg's (1959) two-factor theory, as the motivators and communication factors have great contribution and effect on the job satisfaction of teachers. The research findings support the past studies which shows that both monetary and non-monetary rewards affect job satisfaction of employees to a remarkable extent. Finally, supporting officials in the ministry of Education in the setting criteria for selecting and appointing school principals, ensuring the selection of the best elements, especially with regard to various communication skills.

References

- Al Ajmi, Q., Arshah, R. A., Kamaludin, A., Sadiq, A. S., & Al-Sharafi, M. A. (2017). A conceptual model of e-learning based on cloud computing adoption in higher education institutions. In *2017 International Conference on Electrical and Computing Technologies and Applications (ICECTA)* (pp. 1-6). IEEE.
- Al-Alawi, A. I., Elias, H., Zaid, F. A., Alroaili, M. S., & Al-Bassam, S. A. (2019). Factors affecting Bahraini women working in the engineering fields. *Journal of International Women's Studies*, *20*(7), 289-318.
- Amin, A., Alimni, A., Kurniawan, D. A., Triani, E., & Septi, S. E. (2023). Interpersonal Communication Skills On Student Discipline: Analysis Of The Effects Of Islamic Religious Learning. *Lentera Pendidikan: Jurnal Ilmu Tarbiyah dan Keguruan*, *26*(1), 135-152.
- Baylor, C., Burns, M., McDonough, K., Mach, H., & Yorkston, K. (2019). Teaching medical students skills for effective communication with patients who have communication disorders. *American Journal of Speech-Language Pathology*, *28*(1), 155-164.
- Claypool, M. (2019). *Influence of Team Formation on Team Member Perception of Satisfaction and Participation* (Doctoral dissertation, Purdue University).
- Issa, K., Naziri, Q., Johnson, A. J., Memon, T., Dattilo, J., Harwin, S. F., & Mont, M. A. (2013). Evaluation of patient satisfaction with physical therapy following primary THA. *Orthopedics*, *36*(5), e538-e542.
- Khaliq, A. (2021). Effect of salary, promotion, and relationships with colleagues on secondary school teachers' job satisfaction. *Pakistan Journal of Educational Research and Evaluation (PJERE)*, *4*(1).
- Mohammed, W., Araf, S. M., & Fahmy, A. M. (2021). Nurses' Perception Job Violence and It Is Relation to Their Absenteeism. *Minia Scientific Nursing Journal*, *10*(1), 46-54.
- Najm, A. S., Naeem, H. S., Alaboodi, K. O., Hasbullah, S. A., Hasan, H. A., Holi, A. M., ... & Sultan, A. J. (2022). New systematic study approach of green synthesis CdS thin film via Salvia dye. *Scientific Reports*, *12*(1), 12521.
- Rinata, M., Putra, A., & Goh, T. S. (2022). The Influence Of Organizational Culture And Communication On Work Conflicts Of Employees At Pt. Nagamas Agro Mulia Medan. *Jurnal Mantik*, *6*(2), 1782-1791.
- Schulz, A., Jaksch, S., Schubel, R., Wegener, E., Di, Z., Han, Y., ... & Jordan, R. (2014). Drug-induced morphology switch in drug delivery systems based on poly (2-oxazoline) s. *ACS nano*, *8*(3), 2686-2696.
- Wardani, R. K., Rahmawati, D., & Santosa, H. (2021). The Role of Academic Supervision and Communication on Teacher Performance. *Journal of Education Research and Evaluation*, *5*(2), 302-310.
- Yildiz, V. A., & Kiliç, D. (2021). Investigation of the Relationship between Class Teachers' Motivation and Job Satisfaction. *International online journal of education and teaching*, *8*(1), 119-131.
- Maslow, A. H. (1954). The instinctoid nature of basic needs. *Journal of personality*.
- Ma, X., & MacMillan, R. B. (1999). Influences of workplace conditions on teachers' job satisfaction. *The journal of educational research*, *93*(1), 39-47.