

Measurement of Egyptian Parents' Perception of the Improvements in the Quality of the Governmental Elementary & Pre-Elementary Educational System

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Abstract: *The aim of this research is to investigate parents' perception of the improvements in the governmental education system on the elementary and pre-elementary levels in public Egyptian schools as part of implementing the Egyptian vision 2030. The study adopts a quantitative approach and data from a sample of 240 parents was collected using a self-administrated questionnaire. Data was analyzed using descriptive and inferential statistics. The research results indicated that there is a positive relationship between education quality and parents' perception of the improvements in the educational system. Moreover, the results indicated that the main factor affecting parents' perception is the qualifications of teachers. The research findings provide managerial implications for policy makers on how to improve the governmental education system in Egypt.*

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Introduction

Egypt vision 2030 is considered a step-forward in Egypt's sustainable development and improvement in Egyptian's quality of life through three dimensions; economic, social and environmental sectors. Strong education system in any country always reflects on the growth of its economic and all other sectors, therefore education is considered the backbone of any developed country. Education is a vital factor for development and growth, it is one of the greatest national projects and one of the top national priorities. Educational services refer to services that schools shall make available to parents with a view to improving quality and promoting their effectiveness within the structure of school's education. Educational services are those services that support and are constituted as the foundation for the implementation of educational policies, achieving schools' objectives and promoting the effectiveness of the education system as a whole. Improvement in the educational quality service is considered one of the tools used by the organization to change the culture and overall climate of a country through its operating system and decision-making system (Hwang, & Choi, 2019).

Perceiving education service quality by parents differs; some perceive it as quality in teaching, other in the capability of students and other in students' performance. The most prominent variables affecting students and influencing parent's perception of education quality are school's facilities, programs and services which includes quality of teachers, campus environment and resources (Hwang, & Choi, 2019). The elementary stage is considered an essential stage in the education process, since the children is the hope of the future and are the vital resource for any nation. Consequently, it is the most crucial step in the children's formative development as it shapes them to thinkers, learners as well as social beings.

The main destination of low- and middle-income Egyptian families is the governmental schools, thus the undertaken changes done by the ministry of education will have an impact on student's performance and parent's perception which may affect the whole sectors in the country not only the educational process Sultan & Wong,(2019). Parents are often called a child's first teachers, which is why in many international contexts measuring parental perception in education is highly relevant for education. Thus, this research mainly focuses on parent's perception of the educational quality in the public sector and to what extent the new educational system adopted by the

government affects their perception.

Literature review and hypotheses development

Information is essential in making sense out of the environment by understanding and reacting to it, to which perception is needed to be oriented. Perception is the process of identification and interpretation of sensory information through organized and interpreted way to understand and identify the presented information or the environment. There are different ways of environmental perception, and it is very complex to be measured and takes time to be understood. As well as, the environment is very large in knowing it, therefore, more increasing in its complexity as a system. To define perception, a lot of factors should be considered including attitude, moods, motives, expectation, self-concept and interest that differ from one person to another, thus makes it very wide and complex to give an exact definition for it. (Hwang & Choi, 2019).

Sultan & Wong, (2019) stated that, perception is defined as the mental process by knowing the external world perceived by stimuli. Cognitive perception is not only the perception of the natural characteristics, but also includes the perception of meaning and symbols that are significant. The direct knowledge of things through the senses, the process of receiving, interpreting, selecting and organizing sensory information is created through perception and the science of recognition.

The psychological explanation of the behavior of any human begins with the study of the perception, this study is done by Wilhelm Wundt in Germany, 1879. After understanding the main significance of the behavior between humans, it is proved that it is impossible to find two people that are same in their way of thinking, feelings and interpret sensation, this is because each person interact and interpret to their environment depending on the factors and causes surrounded with. Not only the external and surrounded factors that people are affected with, but also there are internal feelings, thoughts, ideas and expectations from past experience in the person's life or from other person experience they've known about (Keshavarz, & Jamshidi, 2018).

There are important things have to be considered in order to understand the role of perception; the importance of recognize that every person has their own reference to be unique including internal and external factors that affects their attitude and behavior which also affects perceptual process (Vanegas, et al., 2018).

Perceptual process selects incoming stimuli and organizes them into meaningful patterns. This processing is influenced by learning, motivation and personality factors which give rise to expectations. These expectations, in turn, makes the individuals readier to respond to certain stimuli in certain ways and less ready to respond to others. This readiness to respond is called the individual's perceptual set. A perceptual set is an individual's predisposition to respond to events in a particular manner. A perceptual set is also known as a mental set. As tend to perceive what is expected to be perceived, this can also be called perceptual expectations. Many organizational problems, and particularly communication problems are created by failure to appreciate this feature of the perceptual process (Vanegas, et al., 2018).

Donald, Ashleigh, & Baruch, (2018) stated that, through this process the person gains experience and information about the properties of the surrounding environment which is critical for survival. Although the complexity to define the process of the perception, there are three well known stages for perception, which are described by most of researchers (Laksana, et al., 2020 ; Vanegas, et al., 2018).The first stage is sensory stimulation “exposure”, it is the process by which someone comes into physical contact with a stimulus, which is giving the brain alarm to remind an old thing that is associated with a sound, place or smell of something special, in this case the mind receive pictures or alarm that lets the mind goes back to the time of the situation itself (Donald, Ashleigh, & Baruch, 2018)

The second stage is the “attention” which is the process in which the information has actually been recorded in some way; that the information is noticed, thus it is the extent to which processing activity is devoted to a particular stimulus. The stimulus that occurs in the persons’ brain; which is about the response of the brain to specific stimulus either positive ornegative to build up a complete scene. Making up the mind to link the situations with each other; the past with the present (Donald, Ashleigh, & Baruch, 2018).

The third stage is the “interpretation” of the thoughts that arereceived from a specific massage of stage and it may not also be perceived as person’s expectation, there is always a misunderstanding in the step of decoding the message then the conclusion of the consumer perception process is the retention stage. This is marked by the storage of brand information in short-term and long-term memory. As the main goal to the marketers is to stimulate the consumer’s senses and gain attention in the proceeding stages that translate into consumers storing the information about the product or brand into long-term memory (Donald, Ashleigh, & Baruch, 2018).

However, Park, & Holloway, (2018) classified perception into seven components including; the first is stimuli, in which is shown in sensation that are influenced by a lot of stimuli, as family, surrounding economic environment of people. The second is attention; it is based on the stimuli which are paid attention for and this depends on the selection and capacity of stimuli for the people. The third one is recognition; the recognition of the message or the stimuli before being transmitted into behavior in which it is mainly the step between receiving the stimuli and translating it into an action. Then the fourth element which is the translation; in which the message received is translated into action with the appropriate behavior. The fifth component is the behavior; the cognitive process's outcome, it is the response of any change of sensory input recognized by the person, it reflects the individual's personality, learning and other internal and external factors. It is the component in which it can be visible in different forms as behavior and reaction. The sixth component; is the performance initiated from the proper behavior in a situation. The last component is the satisfaction; that depends on the performance the more the performance is, the more satisfaction can initiate. It is measured using the expectation and the actual performance. It is very crucial to understand the factors that can affect this process and the behavior towards something (Park, & Holloway, 2018)

Factors influencing perceptual process

The process of perception is done through the sensory organs by stimulation in a form of messages, taste, sound and touch. It begins with an alarm from these stimuli and then these stimuli after being recognized is then translated to action. There are external and internal things that affect the way that people perceive things or while taking an action towards thing. However, the most factors that influence the people's perception process are factors within oneself including; learning, habit, specialization, motivation toward something and social background (Curry, & Holter, 2019).

The first factor is learning, one of the most crucial roles of perception process as people receive the message differently based on their level of education and the more educated the person is, the more they will be able to perceive the complex information. The second factor is the habit, which is formed very slowly through the person's life time and sometimes it is very difficult to change these habits, thus people perceive situations differently based on their habits. The third factor is specialization, in which the specialty of person controls the way of thinking of a person as well as the way they will perceive anything and their reaction towards it (Curry, & Holter, 2019)

The fourth factor is the motivation, in which increases the person's sensitivity and their seeking toward achieving their needs and to reach a level of satisfaction towards it. The fifth and the last factor is social background, that is the perception of someone based on their social background, the people who are more socially developed have more positive attitude or perception towards any development and achievements rather than the less socially ones (Curry, & Holter, 2019).

Perception of educational service quality

The complexity of the education process results in the difficulty of the perceived quality measurement. The quality perceived in education are grouped into five categories and can be measured in more than one sight including; first perfection; which include zero defects, getting things right from the first time, that means to focus on process as opposed to inputs and outputs. Second, exception which is something distinctive, embodied in excellence, passing a minimum set of standards. Third, fitness for purpose which relates quality to a purpose, defined by the provider. Fourth, value for money which is the focus on efficiency and effectiveness, measuring outputs against inputs. And fifth, transformative is a qualitative change; education is about doing something to the student as opposed to something for the consumer: includes concepts of enhancing and empowering: democratization of the process, not just outcomes. Also, it can be measured through the processes or the outcomes (Curry, & Holter, 2019).

In order to maintain quality or increase it, the education institution have to develop alternative evaluation of the measurements and procedures, and to asses any outcome of the educational process, the desired results have to be defining the educational efforts and could be measured through different perspectives, from parent, student, teacher perceptions (Curry, & Holter, 2019).

Parents perception and involvement in children's Education

Santos, et al., (2020) proved that the involvement of parent in their children early education stages are positively associated with their performance in the school. The parents who are highly participated in the educational process of their children, those children's performance in academic are shown to have higher levels than those whose parents are participated less. Furthermore, child's academic success after early elementary school has been relatively stable. Thus, it's important to highlight the factors that affect the early academic success. Parent-child interactions, are the most important guidance and influence on child's academic development as it is founded that it has a great influence on the increasing of academic performance of student.

Santos, et al., (2020) stated that, many different factors shape the parents' perception of the educational quality and determine whether it is viewed as positive or negative. Parents prefer when the curriculum is based on the child's understanding and not when it is based on the child's ability to memorize. The more a parent gets the chance to be involved in their child's educational procedure the more the parent is satisfied with the educational service delivered. Another factor affecting the parent's perception is, the treatment and quality of explanation a child receives during school hours. For parents it is of high importance that their children are treated with respect and dignity at school. Also, Arar, et al., (2018) pointed that there are other factors that increased positive parental perception in schools include: high level of parental education, democratic systems, acceptable education budgets, and reasonable educational spaces.

Involvement of parent in the education has been measured in various way, including the positive attitudes parents give towards their children education, teachers and schools, the engagement in activates at home and at school. As well as founded that the increased number of activities gives to the child a positive attitude toward the school and education. Parents notify their children about the attitudes in education during out of the hours of the school and these attitudes shown in their behaviors in the classroom and their relationship with their teachers and colleagues (Rather, 2019).

Parents can improve the development of the ability of child's related school by participating in the school's activity which provides them with more information about their children in terms of their learning and development. However, it is stated by some findings that the increasing in the involvement of parents is associated with an increase in the quality of the student relationships with their teachers (Rather, 2019). Additionally, the positive attitude regarding the parents in education life of their children, teachers, school and activities have the ability to influence and affect positively on their academic performance through two ways: first, to be engaged with their children to increase their self-perception of their cognitive competence, or with their teachers and school to build a strong relationship between the student and the teacher. Perceived cognitive competence, defined as how much is the believing of the children is important to successfully accomplish cognitive skills, and that happens when they complete their tasks. Also, the higher parent's involvement, the more the perceived competence level in children. In addition, children's increased perception of perceived cognitive associated to their higher academic performance (Rather, 2019).

Hahn, et al., (2020) added that family involvement is considered to be the caregivers' investment in their children's education. There are various ways that caregivers demonstrated on such as; helping their children on their homework, visiting their children's classroom, attending schools' event, in school volunteering, sharing as a guest speaking through class activates, and participating in the decision-making process. However, these types of involvements differ from one parent to other. In order for schools to satisfy parents, they need to ensure students' safety and improve school culture which includes beliefs, perceptions and attitudes. Opportunities for school-home cooperation are done through parental assistance and meetings and school reports. Likewise, parents are happy as long as they are noticing their children's academic progress (Hahn,et al., 2020).

The most valuable things about the techniques regarding the e-learning is that it allows the greater of access for the students through education, compared to the traditional methods which is less flexible. Lubis, & Lubis (2020) mentioned the influence of well-educated parents on their children as they participate in assessing and evaluating the educational system and quality, hence, two demographics which are students' family education and social background actually make students more aware of the importance of education quality features. On contrary, there are some

disadvantages of this technology including; the less contact of the teacher and the student as face-to-face contact and that e-learning for many teachers may not be acceptable because it consumes a lot of time and also for students who have limited or no technical experience background in this technology(Kong, 2018). In addition, they found that the technology of e-learning in Egypt can't be ignored anymore because its importance and its ability to be used as motivational tool for students.

Students, parents and even teachers of the elementary school have positive perceptions toward using computers, and consuming time using different social networking sites. In addition, it is founded that parents and teachers are important part in controlling information and thoughts of the students. Using e-learning by student can make a very significant difference for students on the way which they can learn and enjoy their learning as well as at the same time creating an environment suitable for them in which it give them the opportunity to manipulate, explore and easily experiment (Kong, 2018).

H1: Parents have positive perception of changes undertaken in governmental elementary levels.

Factors affecting perception of education

The perception of education is shaped by many factors some of which are: the content of the educational material, the qualification of the teachers, the minimum standards of quality set by the government, the type of technology used, and the involvement of parents in the education and even the space and furnishing of the class rooms (Erdener & Knoepfel, 2018). Additionally, Li & Qiu (2018), stated that the factors that contribute most to the level of educational efficiency is the quality of teachers, the curriculum and the method of teaching. Muller (2018); Bond & Bedenlier (2019) also agreed on that, and have conducted questionnaire to measure seven areas of questions including: academic staff, infrastructure, administration, curriculum, library service, and institute location, and future vision and careers. However, the most related factors for the elementary education are:

Teaching staff

According to Bond & Bedenlier (2019), Teachers are one of the main parts of any educational system. Employing and training new and willing teachers are essential to protect children's ability to learn at school. Good teachers lead to a high quality of education. The evaluation of Academic staff is the backbone of the educational system as it includes; qualifications of the academic, teachers with professional experience, teacher's communication skills with students, friendliness of the staff, as well as the research activities. And it is founded that the most important factor to the students is the "communication skills" followed by "friendliness/ approachability". Thus, it is proved that the traits of different personalities are more valuable than professional skills, that it is crucial for the students who are positive in their interpersonal relations regarding their teachers. Additionally, the third criteria depend on the importance of the "professional experience", then followed by "research activity" as well as "academic qualifications". Thus, also proved that the ranking of students is based on the experience rather than subject knowledge, so the interaction between teacher-students showed to be very crucial and effect on the performance of the academic students with a great impact (Bond, & Bedenlier 2019)

Administration service

The administration services include, several variables as the rapidservice, being friendliness, information material availability as "E-learning", automation office systems for customer service "IT support", clear guidelines, several advices and the use of internet. Administration service is considered the main source of student's information and place their top importance on the availability of information material as to upload the curriculum on e-learning to facilitate the way of learning. Followed by friendliness, but not as their top priority as the way to get the information easily (Muller, 2018). However, they noticed that it is not the only factor that matters that it must be with a direct contact with students with high service. As well as from the considerable factors the ease of use of the internet for communication purpose with a continuous guidelines and advices of how to interact easily with, as their aim is to receive a high service quality (Muller, 2018).

Curriculum structure

A curriculum is considered the “heart” of any learning institution which means that schools cannot exist without a curriculum. It matters mainly because of its potential impacts on students. The structure of the curriculum consist of; the interesting module as the content/books, that it is evaluated by the students to what extend they are interesting with the module, followed by the availability of information on the curriculum and their quality, that the educational material is uploaded with high quality and with rich information, and with a great efficiency of the structure, as well as the variety in elective modules, that the students will become more interesting when there is a variety of elective courses to choose from, and the lectures timetable to be convenient to the students (Duraku & Hoxha, 2020).

According to Duraku & Hoxha, (2020) also agreed that curriculum is a comprehensive instructional learning experience designed to facilitate learners' learning in order to establish a good relationship between what is learned and what is run outside the school. Educational development is a process to achieve an increase in the quantity and quality of a student’s knowledge. Curriculum development is defined as planned, a purposeful, progressive, and systematic process to create positive improvements in the educational system. Every time there are changes or developments happening around the world, the school curricula are affected. There is a need to update them to address the society’s needs.

The fundamental purpose of curriculum development is to ensure that students receive integrated, coherent learning experiences that contribute towards their personal, academic and professional learning and development. The design and development of curriculum for courses, topics, and major and minor sequences of topics, should focus on how the educational experience contributes to students' development of the school’s quality. This quality provides a key reference point for the Curriculum Development process. They must be related to the conceptual frameworks, language and practices of the student's field of study through quality learning experiences. Curriculum quality shapes the perception of educational systems (Duraku & Hoxha, 2020).

Infrastructure

The infrastructure includes, the quality of infrastructure that consist of the quality of classrooms and laboratories, as it is the most crucial factor for receiving the information to the students, the surrounding environment that the students sit in a good infrastructure not to be very crowded and well developed as well as the facilities that provided as the sport facilities, and

medical facilities, and the way of handling the problems as the infrastructure quality “administration”, and the services availability to host events such as social and cultural ones (Muller, 2018).

Service quality

A service is defined as any act or performance that one party can offer to another and it is intangible and does not result in the ownership of anything; its production may or may not be tied to a physical product. The service quality should be included in any study that measures the outcome service. It varies depending on the study perspective; thus, there are several methods used to assess the quality of service and it differ according the type of used service, industries, culture, the departments of the industry itself or even the providers of that service (Camilleri, 2021).

The service quality of a firm is tested at each service encounter. If service personnel are bored, uninformed, or too busy to wait on customer, customer will think twice about doing business again with that seller. Customers form service expectations from many sources including; past experiences, word-of-mouth or advertising. In general, customers compare the perceived service with the expected service. If the perceived service falls below the expected service customers are disappointed. If the perceived service meets or exceeds their expectations, they are apt to use the provider again. Successful companies add benefits to their offering that not only satisfy customers but also surprise and delight them (Camilleri, 2021).

The process of managing the quality of services delivered to a customer according to his expectations is called Service Quality Management. It basically assesses how well a service has been given, so as to improve its quality in the future, identify problems and correct them. Service quality management encompasses the monitoring and maintenance of the varied services that are offered to customers by an organization (Halik, et al., 2019).

Managing the service quality is through seven ways; the first way is strategic Concept, which is the top service companies are “customer obsessed.” There is a clear sense of target customers and their needs. The second way is Top-Management Commitment in which the companies have a careful commitment to service quality. The third way is high Standards, which is the best service providers set high service- quality standards such as; the standards must be set appropriately high and a service company can differentiate itself by designing a better and faster delivery system (Halik, et al., 2019).

The fourth way is SSTs, as with products, consumers value convenience in services, it includes; many person-to-person interactions are being replaced by self- service technologies, Not all SSTs improve service quality, but they have the potential of making service transactions more accurate, convenient, and faster for the consumer and also while initiating self-service technologies, some companies have found that the biggest obstacle is not the technology itself, but convincing customers to use it. The fifth way is monitoring Systems which is top firms audit service performance, both its own and competitors, on a regular basis, includes; it collects VOC measurements to check out customer satisfiers and dissatisfies, they use a number of measurement devices as Customer surveys, suggestion and complaint form (Gupta, & Kaushik, 2018).

The sixth way is Satisfying Customer Complaints, which is studying the customer dissatisfaction, because customers whose complaints are satisfactorily resolved often become more company-loyal than customers who were never dissatisfied and every complaint is a gift if handled well. Also, companies that encourage disappointed customers to complain, and also empower employees to remedy the situation on the spot, have been shown to achieve higher revenues and greater profits than companies that do not have a systematic approach for addressing service failures. The seventh way is satisfying employees as well as Customers that excellent service companies know that positive employee attitudes will promote stronger customer loyalty. Give the importance of positive employee attitudes, service companies must attract the best employees they can find (Gupta, & Kaushik, 2018).

Educational service quality

There is part of marketing approaches in the educational process and its relation with the student whom are the customers in Marketing view; education process is a service and the students are the ones who are expected to receive their expense of the educational they consume. This justify that education may rely on product provided selling to more customer “students” level (Abbas, 2020).

Ozdemir, Kaya & Turhan, (2020) claim that school effectiveness generally means achieving the school objectives and goal; Academic outputs are likely to be measured through graded tests, scores and governmental evaluation tools. A problem can appear as school effectiveness definition may vary from one person to another. There are two important dimensions in measuring and defining school effectiveness, first, is the internal effectiveness which illustrates the outcome, success and accomplishments of education quality in the school, however, external effectiveness is the benefits and

positive impact of school outcomes and success on the society as a whole.

When the students take the decision to choose a school, they look for the received service quality, and that proved its importance in the educational function process. In the private schools there is a very high competition for the students to choose the best educational institution, and that makes the process more difficult on the schools to promote well its service with the full fee (Abbas, 2020).

While in the public schools there is more stress on giving the best quality with a very low rewards in back, as well as public ones are most common chosen by parents. At the same time, these schools are asked about the number of students to be increased in order to be in line with the government targets rules. Thus, one of the most important issues in the educational process for any school is how they could manage this issue to reach the best quality of service they give the students. Literatures has used the scale of ECSI model which is widely used to assess the quality of the service received in the education, which failed to show the original model of the educational process. Showing that, it is important and needed for developing separate model in the context of the educational process (Abbas, 2020).

Service quality's dimensions are some measures and scales that describe and identify the quality. It is used to understand the quality dimensions and any features followed by it. There are number of different scales used to measure and find out better scale the service quality from specific perspective of the service based on what service is offered including; SERVQUAL, SERVPREF and INDSERV. The most common measurement used is the SERVQUAL (Parasuraman et al., 1988) which is used by most studies measuring the quality services and it mainly depends on Oliver's EDP which is used to measure and assess the satisfaction and this could be a solution if the performance and even the expectation vary all over the time. Although, the service quality and the perceiving quality level are two totally different concepts to be measured, using the EDP role could measure that complex, also could measure the scores and levels of the expectation and performance that are very difficult to be measured (El Alfy & Abukari, 2020).

While measuring each individually can be a solution but it shows problem in reliability, variance restriction and in the validity of discrimination. Thus, using EDP to measure those values is very beneficial. Soni & Govender (2018); Azam (2018) agreed that according to the model of SERVQUAL scale, there are five dimensions of quality including; First, reliability in which the expected service, skills are applied dependently and accurately without error. Second dimension, is tangibles which is the appearance of personal

service, physical facilities, equipment and support services

The third dimension which is responsiveness that consists of the willingness to offer help and service to someone to meet their needs and wants and also respond effectively in difficult situations. The fourth dimension is assurance, it is about feeling comfort and safe towards the service of employees in the institution to the customer. The fifth dimension is empathy which is about the caring and attention provided from the institution to the customer. (El Alfy & Abukari, 2020).

Relationship between perceptions and service quality

Service quality is measured by different scales, also the perceived quality by parents towards the service quality are done by using multiple regression models. In this content it can be defined as how much of service level is provided to the students that will match their expectations. Part of the quality of service is the similarity degree between the perception of parent's service and expectations. If the parents' perception is lower than expected then the perception level of this service will be very low, while if the perception of service quality exceeds the expectation level then there is a high service quality. And if they are equal then the offered service quality will be moderate (Akdere, Top, & Tekingündüz, 2020).

Ongo (2019) said that there are several types of parents and each perceive quality in a different way, for example, when it comes to parents, they perceive it based on the reputation of the educational institution and quality of teaching, students at the same time pay attention to education process and output, their relation with their teacher and way of teaching. Service quality perception is an attitude derived from an evaluation of the provided education service after the consumption experience.

The good service of educational quality provides better learning opportunities and it has been suggested by (Sharma, Pandit & Bose, 2020). that the parent's perception of education strongly affect the student's success and failure. Also stated that the measurement of service quality should not focus on process alone, it also should include the outcome quality attributes. The dimensions of service quality are still debated among measuring the quality of educational system.

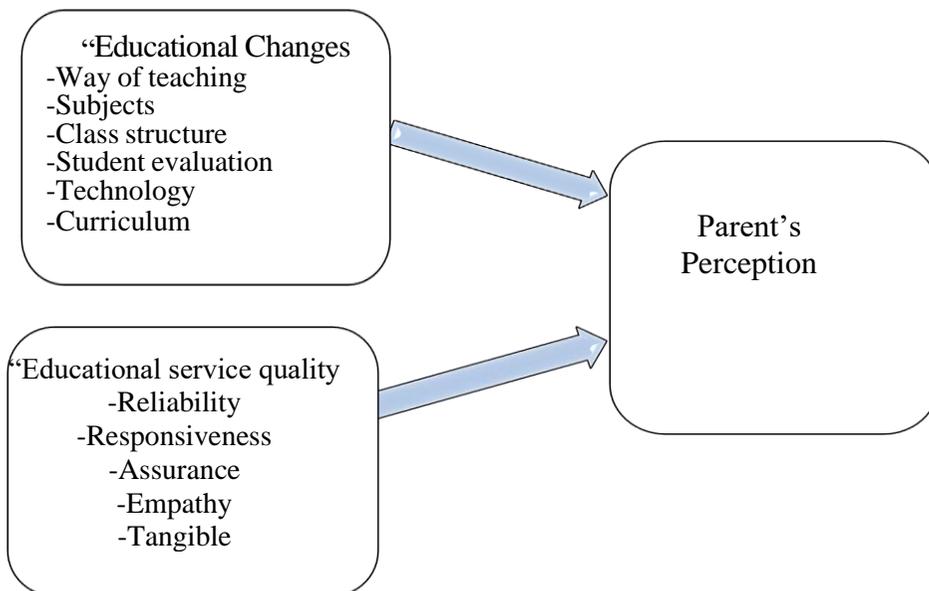
Sharma, Pandit & Bose, (2020) also agreed that parents' attitudes and perception that by spreading positive or negative word of mouth about the schools, thus effects on school reputation meaning, their children perception and attitudes about/towards the school impacting their outcomes, thus schools must accurately measure parents' perception on their children's education and

service quality in order to be able to know what the points of weakness are needed for evaluation and improvement. Therefore, we can assume the second and third hypotheses:

H2: Educational quality affects parental perception of education.

H3: Curriculum affects parents' perception of educational quality more than any other changes.

Figure 1. The conceptual model



Methodology:

The researchers adopted a quantitative approach in the process of measuring the parent's perception in about the changes of the new governmental educational systems in the pre- elementary and elementary schools. According to Polit and Beck (2010), quantitative research methods are basically applied to the collection of data that is structured and which could be represented numerically. In this research there is a tool used that provide a reliable or representative picture of the population through the use of a valid research design , which is conclusive descriptive research.

Population & sampling

The population targeted in the research is any parent who has a child or more in the governmental elementary and pre-elementary schools. The researchers have used non-probability convenience sampling due to the fact that there is no population frame of all the parents of students in elementary and pre elementary public schools. The researchers targeted and selected parents of children in the elementary school stage from public schools in the governorate of Bigger Cairo. The sample size determined by the researchers was 300 respondents but the amount reached was 240.

Data analysis

The researchers used IBM's statistical package for the social science (SPSS), for data coding and verification and analysis Likert scale was used for most sentences of the questionnaire except for the demographics of the sample. Cronbach's alpha was used to test the reliability and consistency of the statements. Moreover, the Spearman correlation is a non-parametric test that is used to check if there are significant differences in the statistics between two or more groups of an independent variable on a constant or ordinal dependent variable. During the data collection process, the researchers found that more than 50 parents are not aware of the new educational changes undertaken in governmental pre-elementary and elementary stages, however, the researchers managed to reach 240 questionnaires from parents that have children in elementary and/or pre-elementary stage and aware with the undertaken changes.

Results

Demographic characteristics

Table 1. Demographics of the sample unit

Characteristic	Frequency	Percentage	Total
Gender:			
• Male	113	47.1%	240
• Female	127	52.9%	
Age:			
• Less than 30	79	32.9%	240
• 30 to less than 40	99	41.3%	
• 40 to less than 50	50	20.8%	
• 50 and above	12	5%	
Occupation:			
• Private sector employee	99	41.3%	240
• Public sector employee	67	27.9%	
• Business owner	21	8.8%	
• Un-employed	7	2.9%	
• Retired	24	10.0%	
• Other: please specify			
Number of children:			
• 1	66	27.5%	240
• 2	98	40.9%	
• 3	57	23.8%	
• 4 and above	19	7.9%	

The above table presents the characteristics of the sample units; the data was collected from both genders males' percentage was 42.4% while females' percentage was 57.6%, Furthermore, the parents included in the sample belongs to different age groups with majority below 50 years old. The table shows that 47.1% was private sector employees, followed by public sector employee by 22.4%, unemployed by 9.4% while business owners and others equal 8.2% &

8.8% respectively and finally retired equals 4.1%. The table also shows that most of the respondents 42.4% had 2 children followed by 27.5% of the respondents had 1 child, then 23.8% had 3 children and finally only 11% had 4 and/or above.

Parents' awareness of the changes

Table 2. Parents' awareness

Awareness	Frequency
Changes in the curriculum	162
Way of teaching	123
Splitting the subjects	50
Decreasing number of students	67
Evaluation system	64
Others	13

(Hint: In Table 2 the total Number of responses exceeds the Number of respondents as each one can select more than one answer)

When asking the parents to select the changes in the educational system that they are aware of it was found that the majority of the parents 162 are aware with the changes in the curriculum, 123 of the parents are aware of the new way of teaching implemented by the teachers. Then, there are 67 parents aware of decreasing number of students in the class, followed by 64 parents are aware of using new evaluation system instead of the exams, 50 parents are aware that subjects have been divided into 4 subjects, and finally Only 13 parents stated that there are other undertaken changes.

Source of awareness

Table 3. Source of awareness

Source of awareness	Frequency
Social Media	97
Schools	117
Journals	30

TV programs	64
Family and friends	74

(Hint: In Table 3 the total Number of responses exceeds the Number of respondents as each one can select more than one answer)

The researchers found that the source of information of the parents about the changes in the new governmental educational systems in the pre-elementary and elementary schools, The highest percentage are agreed on were schools said they know from the schools where only the parents who asked, while the schools didn't explain from itself anything while it's recommended also to give the parents trainings to let them be more informed with the new changes. Followed by the social media, then, family and friends, followed by TV programs and lastly from the journals only 30 parents know from it, and it's regular as most of our sample characteristics are between 30 to less than 40.

Testing the research hypotheses

H1- Parents have a positive perception of changes undertaken in governmental elementary levels

The first hypothesis is a descriptive hypothesis that aims to describe the parents' perception of the new system by analyzing their responses across the three levels of perception (exposure – attention and interpretation) in addition to overall evaluation of the system.

Table 4. Parents' perception of changes in the educational system

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Total	Mean
1. The new educational system is better than the old one	42 (17.5%)	63 (22.3%)	43 (17.9%)	68 (28.3%)	24 (10.0%)	240	2.87
2. The new educational system gives a better service for students.	26 (10.8%)	54 (22.5%)	59 (24.6%)	70 (29.2%)	31 (12.9%)	240	3.11
3. There is a change in the teacher's way of teaching in the new educational system	40 (16.7%)	56 (23.4%)	58 (24.3%)	67 (28.0%)	18 (7.5%)	239	2.86
4. Adding digital content in the educational system will provide better learning for students in primary levels	32 (13.3%)	28 (12.7%)	55 (22.9%)	98 (40.8%)	27 (11.3%)	240	3.25

Table 4 indicates the overall neutral bends toward negative parent's perception of the new educational changes undertaken in the pre- elementary and elementary levels. Where the lowest level of agreement shown in the changes of the way of teaching in the new educational system, the majority were disagreed as they did not perceive a real change in the teachers' way of teaching after the new educational systems were applied with a mean (2.86). Moreover, when they were asked about the new educational system is it better than the old one, the majority of the parents were disagreed with a mean (2.87), as they explained that there is a huge problem in its application, they couldn't have applied it effectively until now.

However, parents had a neutral perception of the service given in the new educational system for students, as their opinion is; it is not that much better than the old educational system with a mean (3.11), the researchers found that some of the parents agreed with the new changes, as they thought it could be beneficial for their children by giving them a better service but it was found that the majority are neutral as it didn't apply in all schools.

Parents also had a neutral opinion when they were asked if adding digital content in the educational system will provide better learning for students in primary levels with a mean (3.25).

Table 5. Parents’ exposure to changes

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Total	Mean
1. The changes are applied in my children’s school.	23 (9.6%)	45 (18.8%)	59 (24.6%)	100 (41.7%)	13 (5.4%)	240	3.15
2. I’m well informed with the changes that are applied in the new educational system.	20 (8.3%)	47 (19.6%)	68 (28.3%)	86 (35.8%)	19 (7.9%)	240	3.15
3. Schools have explained the undertaken educational changes to parents	40 (16.7%)	55 (22.9%)	68 (28.3%)	65 (27.1%)	12 (5.0%)	240	2.81

Table (5) illustrates the first stage of perception which is the exposure of the parents to the changes, which shows that the majority had a neutral opinion. The lowest level of agreement was that the schools have not explained the educational changes with a mean of (2.81). This shows that low effort was exerted on making parents aware, while they knew about the changes when they saw the new curriculum with their children, when they were asked about whether they are well informed with the changes or not that are applied in the new educational system, the majority of the parents were neutral agreed that they were slightly informed with a mean of (3.15), by clarifying that parents who care and ask the teachers about the new changes are the ones who understood and become aware of the changes. And finally, the majority was neutral agreed on that the new educational system is applied in their children’s schools with a mean of (3.15).

Table 6. Parent’s attention to changes

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Total	Mean
1. I am so interested in the new educational changes.	10 (4.2%)	23 (9.6%)	41 (17.2%)	112 (46.9%)	53 (22.2%)	239	3.73
2. I am noticing the effect of the changes that are applied in the education system on my children.	22 (9.2%)	63 (26.3%)	61 (25.4%)	74 (30.8%)	20 (8.3%)	240	3.03
3. The new applied curriculum has improved my children’s education level.	33 (13.8%)	53 (22.1%)	73 (30.4%)	63 (26.3%)	18 (7.5%)	240	2.92
4. I have noticed that the subjects in the elementary stage are splitted.	14 (5.8%)	4 (16.7%)	71 (29.6%)	103 (42.9%)	12 (5.0%)	240	3.25

Table (6) describes parents’ attention to changes which shows that most of the parents are interested in knowing and applying the new educational changes with a mean (3.73). However, the parents were neutral about noticing the new changes that are applied in the schools of their children with a mean (3.03), which indicate that the new educational system are not applied effectively or not well communicated. Also, most did not agree that the new curriculum improved their children’s education level with a mean of (2.92) indicated a neutral slightly disagree result. Lastly, most parents are neutral agreed toward the subjects in the elementary stage have been divided into 4 subjects only with a mean (3.25)

Table 7. Parents' interpretation of the changes

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Total	Mean
1. I noticed the changes of the courses content and enhancement of the curriculum	27 (11.3%)	51 (21.3%)	54 (22.5%)	89 (37.1%)	19 (7.9%)	240	3.09
2. The new curriculum is better than the old one.	25 (10.4%)	42 (17.5%)	50 (20.8%)	102 (42.5%)	21 (8.8%)	240	3.22
3. The qualification of the teachers is one of the most important things of the improvements.	12 (5.0%)	27 (11.3%)	26 (10.8%)	92 (38.3%)	83 (34.6%)	240	3.86
4. The communication between the teachers and the students help in the improvements in the educational system.	11 (4.6%)	7 (2.9%)	23 (9.7%)	105 (44.1%)	92 (38.7%)	238	4.09
5. The new class seating structure in the pre-elementary stage is better than the old one.	16 (6.7%)	26 (10.9%)	56 (23.5%)	81 (34.0%)	59 (24.8%)	238	3.59
6. Reducing the number of students in the class is an important improvement.	13 (5.4%)	11 (4.6%)	26 (10.9%)	85 (35.6%)	104 (43.5%)	239	4.07
7. The new students' evaluation system is better than the old one.	15 (6.3%)	36 (15.0%)	67 (27.9%)	61 (25.4%)	61 (25.4%)	240	3.49

Table (7) indicates the interpretation of the parents; the majority of the parents were neutral that the changes of the courses content and enhancement of the curriculum with a mean (3.09). Also, the majority of the parents are neutral towards the new curriculum is better than the old one with a mean (3.22). Moreover, it is founded that the qualification of the teachers is one of the most important things of the improvements as most of the parents agreed on the qualification of the teachers with a mean (3.86), explaining that even with the best curriculum without a good teacher is useless. Also, majority of the parents agreed that the communication between the teachers and the students help in the improvements in the educational system, who are the majority of the respondents with a mean (4.09).

Furthermore, most of the parents agreed that the new class seating structure in the pre-elementary stage is better than the old one that helps for a better communication between the teacher and the students with a mean (3.59). Also, most parents interpreted that reducing the number of students in the class is an important improvement as in the governmental schools the classrooms are so crowded, so taking an action to reduce the capacity will be a great improvement for a better learning with a mean (4.07). Finally, parents agreed that the new students' evaluation system is better than the old one with a mean of (3.49), which indicate that most of parents are aware that there won't be exams till primary six and it will be based on evaluation system.

Table 8. Reliability of the statements measuring parent's perception of the changes

Reliability	Statistics
Cronbach's Alpha	N of Items
.905	18

Reliability is consistency or stability of measurement over a variety of conditions in which basically the same results should be obtained. And to obtain reliable measures researchers prefer multiple-item questionnaires rather than single item tests as it is found that the most appropriate indicator of scale reliability is when a measure is composed of two items.

Cronbach's coefficient alpha (Ravinder & Saraswathi, 2020). Cronbach's alpha reliability is one of the most widely used measures of reliability in the social and organizational sciences. Cronbach's alpha is referred to as a measure of "internal consistency" reliability. If the Cronbach's Alpha score exceeds 0.7, then the set of statements forming up a variable are reliable.

The researchers utilized Cronbach's Alpha to evaluate the reliability of the statements that measure parent's perception of the changes. The results showed that the reliability was (0.905) which indicates that the statements used to measure parent's perception of the changes were reliable. The grand mean was (3.308), which indicates that parents have a neutral perception of changes undertaken in governmental elementary levels. Although, it diverse that some changes bend to agreement and other to disagreement, which indicates that they are still not totally convinced with the new changes.

Results of testing hypothesis 1

Therefore, hypothesis one is partially accepted. As the results showed that the majority of the parents have neutral perception of the changes undertaken in governmental elementary and pre-elementary levels.

H2- Educational quality affects parental perception of education

Table 9. Parents' opinion of educational service quality

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Total	Mean
1. The quality of the new educational system is better than the old one.	28 (11.7%)	45 (18.8%)	51 (21.3%)	79 (32.9%)	37 (15.4%)	240	3.22
2. The new educational system has improved the educational environment for the students.	21 (8.8%)	52 (21.7%)	71 (29.6%)	62 (25.8%)	34 (14.2%)	240	3.15
3. School buildings and premises are safe.	39 (16.3%)	44 (18.4%)	57 (23.8%)	81 (33.9%)	18 (7.5%)	239	2.98

Table (9) shows the statements measuring parent's overall perceived educational service quality and the results reflect that the majority of the respondents were neutral. As, they were neutral about the quality of the new educational system with a mean of (3.25), explaining that some of the parents believe that the old system is better than the new one as they are well informed with the regular system from their elder children, so they prefer the old one. While on the other hand, there are parents agreed that the new system is better than the old one as it will give the students more privilege and will help to enhance their level of education. Hence, parents had a neutral response when they were asked if the new educational system improved the school environment with a mean of (3.15). Furthermore, the majority responded with neutral bends towards disagreed that school building is safe with a mean of (2.93). The grand mean was (3.1158), which indicates that the parent's perception towards the educational service quality were neutral.

Table 10. Reliability of the statements measuring parent's opinion of educational service quality

Reliability Statistics	
Cronbach's Alpha	N of Items
.709	3

The results showed that the Cronbach's Alpha was (0.709) which indicates that the statements used to measure parent's perception of the educational service quality were reliable.

Table 11. Relationship between perception and educational service quality

Correlations				
Spearman's rho	Perception Correlation	Perception	Parents opinion of education service quality	
	Coefficient	1.000	.753**	
	Sig. (2-tailed)	.	.000	
	N	235	234	
	Parents perception of	Correlation	.753**	1.000
		Coefficient		
	education service quality	Sig. (2-tailed)	.000	.
		N	234	23

The test used in this study is Spearman's rank-order correlation which is the nonparametric version of the Pearson product-moment correlation. Spearman's correlation coefficient, (ρ , also signified by r_s) measures the strength and direction of association between two ranked variables. And table (11) indicates that there is a relationship between the parent's perception and educational service quality as the p-value equals 0.000. Although, there is a strong positive relationship between both variables and the correlation coefficient is 0.753, which indicates that if the educational service quality is improved the parent's perception will be positive.

Table 12. Parent's opinion of the reliability of service quality

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Total	Mean
1. The ministry of education is able to apply the new system right from the first time.	31 (13.0%)	72 (30.1%)	68 (28.5%)	52 (21.8%)	16 (6.7%)	239	2.79
2. Teachers are always willing to help the students.	33 (13.8%)	60 (25.0%)	68 (28.3%)	67 (27.9%)	12 (5.0%)	240	2.85
3. Qualification of teachers have been upgraded in the new educational system	45 (18.9%)	73 (30.7%)	67 (28.2%)	40 (16.8%)	13 (5.5%)	238	2.59

While table (12) illustrate parent's opinion of the reliability of service quality, and it is founded that the majority disagreed. Moreover, most of the parents disagreed on the ministry of education's ability to apply the new changes right from the first time with a mean of (2.79). Also, neutral bends towards disagreed regarding the teachers' willingness to help which give the researchers' insights that not all the teachers are the same even in the same school there are teachers that are helpful and qualified, and others are not with a mean (2.85).

Furthermore, when the parents asked whether the teacher's qualifications have been upgraded after the undertaken training that the ministry of education said that they have undergone through, it is founded that the majority of the respondents disagreed, that there are no changes in their qualification with a mean (2.59). The grand mean was (2.7482), this means that the majority of parents slightly disagreed on the reliability of service.

Table 13. Reliability of the statements measuring parent's opinion of the reliability of service quality

Reliability Statistics	
Cronbach's Alpha	N of Items
.769	3

Cronbach's Alpha has been used in order to identify the reliability of statements regarding parent's opinion of the reliability of service quality. The results showed that the reliability was (0.769) which in turn indicates that the statements used to measure reliability were reliable.

Table 14. Relationship between parent's perception and service reliability

Correlations				
		Perception	reliability	
Spearman's rho	Perception	Correlation Coefficient	1.000	.579**
		Sig. (2-tailed)	.	.000
		N	235	233
reliability		Correlation Coefficient	.579**	1.000
		Sig. (2-tailed)	.000	.
		N	233	237

** . Correlation is significant at the 0.05 level.

Table (14) indicates that there is a relationship between the parent's perception and reliability as the p-value equals (0.000). Although, there is a strong positive relationship between both variables as the correlation coefficient is (0.579).

Table 15. Parent’s opinion of the assurance of educational service

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Total	Mean
1. I feel safe in dealing with the governmental schools.	37 (15.5%)	48 (20.1%)	48 (20.1%)	86 (36.0%)	20 (8.4%)	239	3.02
2. The teachers apply the new system in a professional way.	44 (14.2%)	75 (31.4%)	81 (33.9%)	38 (15.9%)	11 (4.6%)	239	2.65
3. The teachers are well informed about the new curriculum.	36 (15.0%)	50 (20.8%)	82 (34.2%)	62 (25.8%)	10 (4.2%)	240	2.83

Table (15) indicate parent’s opinion of the assurance of the educational service, it is founded that parents are neutral agreed in dealing with the governmental schools, while the researcher got insights that they don’t have another choice that is affordable rather than the governmental school, so they have to deal with it with mean (3.02). Moreover, when they were asked about the teachers whether they apply the new system in a professional way or not it is founded that they were neutral bends toward disagreed. And it was founded that some parents are not fully aware how the teachers apply the newsystem while those who are aware disagree on the professionalism of the teachers, with a mean (2.65). Also, the majority also are neutral bend towardsdisagreed that the teachers are well informed with the new curriculum with a mean (2.83). The grand mean was (2.8326), this means that the majority of parents slightly disagreed that their perception is affected by assurance of service quality

Table 16. Reliability of the statements measuring parent’s opinion of the assurance of service

Reliability Statistics	
Cronbach's Alpha	N of Items
.779	3

Cronbach’s Alpha has been used in order to identify the reliability of statements regarding parent’s opinion of the assurance of service quality. The results showed that the reliability was (0.779) which in turn indicates that the statements used to measure assurance were reliable.

Table 17. Relationship between parent's perception and assurance of educational service

Correlations				
			Perception	Assurance
Spearman's rho	Perception	Correlation Coefficient	1.000	.485**
		Sig. (2-tailed)	.	.000
		N	235	235
	Assurance	Correlation Coefficient	.485**	1.000
		Sig. (2-tailed)	.000	.
		N	235	239

** . Correlation is significant at the 0.05 level.

Table (17) indicates that there is a relationship between the parent’s perception and assurance as the p-value equals (0.000). Moreover, there is a moderate positive relationship between both variables as the correlation coefficient is (0.485).

Table 18. Parents’ opinion of the empathy of service

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Total	Mean
1. Teachers in the new educational system gives each student an individual attention.	56 (23.4%)	74 (31.0%)	61 (25.5%)	38 (15.9%)	10 (4.2%)	239	2.46
2. The new educational system help the teachers to understand student’s needs.	27 (11.3%)	52 (21.7%)	76 (31.7%)	70 (29.2%)	15 (6.3%)	240	2.98
3. Teachers are kind with the students.	38 (15.8%)	33 (13.8%)	77 (32.1%)	79 (32.9%)	13 (5.4%)	240	2.98

Table (18) indicates the parent’s opinion of empathy of service quality where the majority of parents were neutral bends towards disagreed.

When asked whether teachers in the new educational system if it gives each student an individual attention most respondents believed that teachers do not give each student individual attention with a mean (2.46)

The bigger portion of our respondents responded neutral about that the new educational system did help the teachers to understand student’s needs with a mean (2.98). Most parents responded neutral agreed when they were asked if teachers treated their children in a kind and humane manner; this response shows that parents are not fully aware about the teachers’ attitudes with a mean (2.98). The grand mean was (2.8131), this means that most parents slightly disagreed with the empathy of educational service.

Table 19. Reliability of the statements measuring parent’s opinion of the empathy of service

Reliability Statistics	
Cronbach's Alpha	N of Items
.750	3

Cronbach’s Alpha has been used in order to identify the reliability of statements regarding parent’s opinion of the empathy of service quality. The results showed that the reliability was (0.750) which in turn indicates that the statements used to measure empathy were reliable.

Table 20. Relationship between parent's perception and empathy

Correlations				
			Perception	Empathy
Spearman's rho	Perception	Correlation Coefficient	1.000	.620**
		Sig. (2-tailed)	.	.000
		N	235	235
	Empathy	Correlation Coefficient	.620**	1.000
		Sig. (2-tailed)	.000	.
		N	235	239

** . Correlation is significant at the 0.05 level.

Table (20) indicates that there is a relationship between the parent’s perception and assurance as the p-value equals (0.000). Although, there is a strong positive relationship between both variables as the correlation coefficient is (.620).

Table 21. Parents’ opinion of the responsiveness of educational service

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Total	Mean
1. Teachers respond to parent’s queries	22 (9.2%)	47 (19.6%)	66 (27.5%)	85 (35.4%)	20 (8.3%)	240	3.14
2. Teachers are willing to help students in the governmental schools.	27 (11.3%)	45 (18.8%)	85 (35.6%)	66 (27.6%)	16 (6.7%)	239	3.00
3. I can easily contact the teacher of my children	26 (10.8%)	52 (21.7%)	64 (26.7%)	73 (30.4%)	25 (10.4%)	240	3.08

Table (21); when parents were asked about the responsiveness of governmental schools in general all responses were neutral. When parents were asked whether or not the teachers were responsive to their queries a slightly higher portion agreed that their queries were actively responded to with a mean (3.14) which is considered neutral. Parents had a neutral response when asked about the teachers’ willingness to help students this shows that teachers in governmental schools might be helpful but their help is not adequate with a mean (3.00). Parents were asked how easy it was to contact their child’s teacher; some parents could easily contact their child’s teacher others could not reach them at all, the overall response was neutral with a mean (3.08). The grand mean was (3.0753), this means that the majority of parents were neutral regarding the responsiveness of educational service.

Table 22. Reliability of the statements measuring responsiveness of educational service.

Reliability Statistics	
Cronbach's Alpha	N of Items
.847	3

Cronbach's Alpha has been used in order to identify the reliability of statements regarding parent's opinion of the responsiveness of service quality. The results showed that the reliability was (0.847) which in turn indicates that the statements used to measure responsiveness were reliable.

Table 23. Relationship between parent's perception and responsiveness

Correlations				
			Perception	responsiveness
Spearman's rho	Perception	Correlation Coefficient	1.000	.423**
		Sig. (2-tailed)	.	.000
		N	235	235
	responsiveness	Correlation Coefficient	.423**	1.000
		Sig. (2-tailed)	.000	.
		N	235	239

** . Correlation is significant at the 0.05 level.

Table (23) indicates that there is a relationship between the parent's perception and assurance as the p-value equals (0.000). And the relation is moderate positive relationship with correlation coefficient of (0.423).

Table 24. Parents’ opinion of the tangible of educational service

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Total	Mean
1.The governmental schools have up-to-date equipment (Tools used in teaching- Internet)	64 (26.8%)	87 (36.4%)	60 (25.1%)	24 (10.0%)	4 (1.7%)	240	2.23
2. The school’s new physical facilities (desks-boards- chairs) are better than the old one.	46 (19.2%)	75 (31.3%)	64 (26.7%)	47 (19.6%)	8 (3.3%)	240	2.57
3. Schools provide several activities (art - sports-music) for students	45 (18.8%)	50 (20.8%)	61 (25.4%)	72 (30.0%)	12 (5.0%)	240	2.82

Table (24) indicates that the majority of parent’s opinion disagreed of the tangible of service quality in the governmental schools. The parents strongly disagree that the governmental schools have up-to- date equipment (Tools used in teaching- Internet) explaining that in most of the schools there is internet in the new system while it is not working with a mean(2.23) Moreover, the majority of them were neutral about the physical facilities of the school such as (desks, boards, and chairs) that it is better thanthe old one. Where the answers were almost equal that it shows that there areschools have got new physical facilities and others not with a mean (2.57)

Also, they were neutral that the schools provide several activities (arts, sports and music) for the students with a mean (2.82). The grand mean was (2.5370), this means that the majority of parents were disagreed that regarding tangible of educational service.

Table 25. Reliability of the statements measuring parent’s opinion of the tangible of educational service

Reliability Statistics	
Cronbach's Alpha	N of Items
.732	3

Cronbach’s Alpha has been used in order to identify the reliability of statements regarding parent’s opinion of the tangible of service quality. The results showed that the reliability was (0.732) which in turn indicates that the statements used to measure tangible were reliable.

Table 26. Relationship between parent's perception and tangible

Correlations				
		Perception	Tangible	
Spearman's rho	Perception	Correlation Coefficient 1.000	.576**	
		Sig. (2-tailed)	.	
		N	235	
	Tangible	Correlation Coefficient .576**	1.000	
		Sig. (2-tailed)	.	
		N	235	

**. Correlation is significant at the 0.05 level.

Table (26) indicates that there is a relationship between the parent’s perception and assurance as the p-value equals (0.000). And there is a positive relationship but moderate between both variables as correlation coefficient is (0.576).

Results of testing hypothesis 2

The researchers investigate the relationship between parents' perception of the new educational system and each dimension of the service quality and the results showed that there is a significant positive relationship between all SERVQUAL dimensions and parents' perception; therefore **H2 is accepted**.

Testing hypothesis 3

H3: Curriculum affects parents' perception of educational quality more than any other changes

Table 27. Factors affecting perception of the educational quality

Characteristic	Frequency	Percentage	Rank
Way of teaching	68	28.3%	2
Qualification of teachers	73	30.4%	1
Teacher's communication with students	53	22.1%	3
Splitting the subjects	7	2.9%	5
Changes in the curriculum	19	7.9%	4
Number of students in the class	18	7.5%	4
Others (please specify...)	2	0.8%	6
TOTAL	240		

The researchers used a question asking parents to select the most important factor affecting their perception of the new system and used the frequency and percentage of each factor to rank them and after analyzing the factors, the highest percentage goes for the qualification of teachers, way of teaching and communication with the students. Then the number of the students in the class as the researchers have received a lot of comments about reducing the number of students in the governmental

schools as it reached 100 students in one classroom which restrict the teachers and didn't give them the opportunity to teach well, and also the changes in the curriculum affects the parent's perception with the same degree of the student's number. Then splitting the subject, which most of the parents agreed that it is an important factor by splitting the subjects into 4 subjects only will facilitate the curriculum for the elementary stage. Lastly, only 2 parents added more factors such as; the communication between the teachers and the parents, the usage of the physical facilities in the school for each student, and the responsibility of the administration to monitor the school and the teachers.

4.3. Results of testing hypothesis 3

As the results showed that curriculum is not the main factor affecting parents' perception of educational quality and the factor that has the largest effect on perception is the qualification of teachers. Therefore **H3 is rejected.**

Conclusion

The aim of this research was to measure parent's perception of the improvements in the quality of governmental elementary and pre-elementary educational system in line with Egypt vision 2030. After testing the research hypotheses, the researchers concluded that:

In hypothesis one, the results showed that there is neutral perception of parents of the changes undertaken in governmental elementary and pre-elementary levels. As part of the parents were disagreed and they explained that there is a problem in its application, they couldn't apply the new system effectively until now in the schools. Also, it is found that parents had a neutral perception of the service given in the new educational system for students, as the researchers found that some of the parents agreed with the new changes, as they thought it could be beneficial for their children by giving them a better service but it was found that the majority are neutral as it didn't apply in all schools and not all the parents are well informed with the new system.

Regarding hypothesis two, the results showed that educational quality affects parental perception of education, Moreover, the level of service quality in educational institutions is measured using five dimensions' SERVQUAL model. The results showed that there is a strong positive relationship between the parent's perception and the five dimensions of service quality which indicates that the higher the enhancement in service quality of educational system, the more positive perception is established

among parents of the new education system.

Furthermore, in hypothesis three, the results showed that curriculum doesn't affect parents' perception of educational quality more than any other changes, and the main factor affecting perception is the qualification of teachers. Egyptian parents rank the most important factor that affect the educational quality is the qualification of the teachers then the way of teaching then the communication between students and the teachers.

Recommendations

- Government schools serve the majority of children in our country. Student performance improves when teachers use curriculum-delivery strategies that specifically address the needs of their students, when the school environment is positive, and when parents are involved in their children's education. Therefore, schools' heads should concentrate on these three areas curriculum delivery, school environment, and parental involvement.
- The issue of overcrowding in schools isn't a new one, teachers in overcrowded schools often report a lack of resources. Overcrowded classrooms lessen the educational quality; accordingly, the minister of education should acknowledge and address overcrowding issue in classrooms. Policy makers can begin to avoid this problem by enforcing laws that prohibit overcrowding.
- Policy makers should focus not only on funding for building new schools and improving older buildings but also on raising funds to improve the teachers, particularly in low-income areas. Since many teachers choose to work in affluent areas because of the potential for better pay or working conditions, the quality of education can suffer accordingly, it is recommended that policy makers and school officials work together to provide incentives for teachers.
- It is recommended to form a professional academy to train teachers and to establish yearly evaluation, so students with greater educational needs will benefit from the improved teaching quality.
- It is recommended that the new system needs more reforms, testing and research prior to the implementation because the current one is still flawed and lacks essential elements of success.
- Regarding the parents, involving parents in their children's by allowing them to participate in the reform process, school heads should hold regular parents meeting to keep parents informed about the changes in the education system and take their opinions and suggestions into consideration.

Suggestions for further researchers

- Parental perception of educational quality can be investigated in other educational levels such as middle school and high school levels.
- Future researchers can conduct the same research in governorates other than Cairo and Giza since we only collected data from those two cities. Future researchers could work on this limitation to have more generalizable results.
- Future researchers can apply the same study in different countries and compare the results of the different countries.
- Future studies can assess the effects of the new educational system on students satisfaction.

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