Analysis of customer satisfaction using Total Quality Management (TQM) junior high school

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Abstract:
To develop the potential of students must be supported by quality education. Total Quality Management becomes a management approach centered on quality for long-term success through customer satisfaction. The purpose of this study is to find out how customer satisfaction is assessed from aspects of tangibles (direct evidence), reliability, responsiveness, assurance, and empathy. This research uses mixed methods with the Embedded Concurrent model (unbalanced mixture), applied to students with a sample of 90 students as respondents chosen randomly with 25 items of questions, observations, interviews, documentation. The findings of these study address customers getting satisfaction with the services provided by schools. With responsiveness aspects that are more prominent than other elements.

Keywords: Customer Satisfaction; Education Quality; Total Quality Management

Introduction
The school is a place to develop expertise, hone skills, create products for the community, and nurture individual potential and entry points for the next generation of academic excellence. Schools play an essential role in shaping and developing the potential possessed by students. In developing the potentials of students, quality education must be created. With quality education, education produces likely young workers who are tough and ready to compete in the world community (Fadli, Mudjiran, Ifdil, & Amalianita, 2019). In addition to being able to satisfy customers, an educational institution must understand the concept of Total Quality Management.

TQM is a management approach to an organization, centered on quality, based on the participation of all its members and aims for long-term success through customer satisfaction, and benefits for all members of the organization and society (Wahid, Amboningtyas, & Seputro, 2018). Furthermore, TQM emphasizes that quality improvement must be based on educational institutions to continuously and continuously improve the capacity and ability of the organization to meet the demands and needs of students and the community (Ross, 2017).
The importance of implementing Total Quality Management (TQM) as a solution and the best way for an educational institution to compete and excel in global competition by producing the best quality (Avila, 2018). In line with researchers who research the importance of TQM in schools. The results of his study show that TQM in ISO-based schools need to be implemented to find out how internal and external levels play a role in improving the quality of education so that it can be used as a reference for what needs to be developed and what needs to be maintained to achieve the target of good quality education to produce satisfaction from students and parents (Gustini & Mauly, 2019). Supported by research that conducts research that implements total quality management at the planning, implementation, evaluation and continuous improvement stages in the implementation of total quality management in the 30 Primary Schools in South City, the results show that the implementation of the total quality management of the four stages is at high criteria (Husain, 2017).

Furthermore, other researchers found that the implementation of total quality management had a significant positive effect on improving the quality of education (Trihandayani, Utomo, & Astutti, 2018). In line with research that found Total Quality Management (TQM) effective in the implementation of character learning management (Pratama, 2019). Student and parent satisfaction is a significant indicator in assessing the successful implementation of Total Quality Management (TQM) in schools (Munir, 2018). In this case, the satisfaction of students and parents will be met if the results of the application of Total Quality Management (TQM) can improve the quality of education in schools. In addition to students and parents, some consumers and customers cannot be ignored, namely internal customers such as school principals, teachers, staff and institutions, or graduate school recipients.

Customer satisfaction is an emotional response to the experience of consuming a product for services. Customer satisfaction in which the assumption of product quality meets customer expectations, if the quality of the product is lower when compared to expectations, then the customer is dissatisfied or disappointed. On the contrary, if the quality matches or even exceeds expectations, the customer will feel satisfied. Customer satisfaction can arise if the quality of the product is comparable or exceeds customer expectations before buying it. Thus, customer satisfaction will come automatically if the services sold match or even exceed what the customer wants. (Cheng et al., 2016).

Furthermore, the level of student satisfaction as an external customer of the school’s education services can be measured in essence with five dimensions or indicators including the tangible aspects which include physical facilities, cleanliness, tidiness, and comfort of the room, equipment, tidiness and employee and employee appearances, the use of sophisticated technology, facilities and infrastructure, excellent exterior and interior arrangement of the room to promotional materials. The aspect of reliability is the dimension that measures the reliability of schools in providing services to customers, namely how the ability of schools to assist what was promised promptly, accurately, and satisfactorily, including the work constitution (performance) and the ability to be trusted. (Mulyawan & Rinawati, 2017)

Third, the aspect of responsiveness that includes the desires of staff both educators and education staff in helping customers and providing services quickly and responsively, aspects of assurance that includes knowledge, abilities, politeness, and trustworthiness that is owned by all staff and avoid the
risk of doubt and guaranteed safety, empathy aspects where there is ease in relationships, good communication, personal attention and understanding the needs of students as customers (Amin, 2018).

From this explanation, it can be concluded that customer satisfaction is a comparison between reality and expectations of a customer towards the product or service enjoyed. The level of customer satisfaction can be measured by Tangibles, Reliability, Responsiveness, Assurance, and Empathy indicators. This means that the higher the score obtained from these indicators, it means the higher the customer satisfaction. Based on these things, it appears that the actual quality of education is the accumulation of all the quality of services available in educational institutions received by its customers. Educational facilities are a long process, and other activities influence their activities (Cherkunova, 2016). If all activities are carried out well, then the result of education services will achieve good results, in the form of integrated quality.

Based on the results of interviews with school principals of SMP Al Kautsar Bandar Lampung, it was stated that providing the best facilities and services had been done to support customer satisfaction, but there was no specific reference. To be able to maintain the quality and trust of customers, school principals, committees, teachers, staff, and students must have an obsession and commitment to quality, namely quality education. They had a vision and mission that is focused on meeting the needs and expectations of its customers, both internal customers, such as teachers and staff, as well as external customers such as students, parents of the students themselves and the community at large. If the needs of internal customers can be appropriately met, then any external requirements, in this case, students become absolute needs that must be met by all domestic customers in the school environment. This is what underlies researchers interested in examining how much the level of customer satisfaction, using the method of Total Quality Management as a reference so that it can be known and evaluated what must be improved and improved to increase student satisfaction and to improve the quality of education of SMP Al Kautsar Bandar Lampung

Methods
The method in this research is the mixed methods method with the Embedded Concurrent model (unbalanced mixture). Embedded Concurrent is a qualitative and quantitative research method by mixing the two ways unbalanced. The subjects in this study are students of class IX H, IX G, and VIII H SMP Al-Kautsar who have the characteristics or conditions to be studied, in this case, in the form of customer satisfaction. Taking subjects using random sampling techniques, as many as 90 students were chosen as research subjects.

Data collection techniques using observation, interviews, and questionnaires on the scale of external customer satisfaction of SMP Al Kautsar Bandar Lampung includes five indicators of student satisfaction, namely 1) Tangible, 2). Reliability, 3). Responsiveness, 4). Assurance, and 5). Empathy. The questionnaire was made using a Likert scale which is used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena that have gradations from very positive to very negative, namely: Very satisfied who were given a score of 5, Satisfied who was given a score of 4, Quite Satisfied given rating 3, Dissatisfaction with a score of 2 and Dissatisfaction with a score of 1. Which is the scale produced as a whole is valid.
Results and Discussion

The results study about customer satisfaction. Aspects assessed include 1) Tangible, namely the ability of the school to show itself to external parties, including the physical facilities, equipment, educational equipment, and employee performance. 2) Reliability, namely the authenticity of the school in providing services. 3) Responsiveness, namely speed of service, 4) Assurance, namely the ability of schools to give a sense of security and confidence, 5) Empathy, namely individual attention to customers. Furthermore, the research findings of the researchers are described as follows

Tangible aspects

Based on quantitative data. The results of questionnaire regarding tangibles aspects, students who answered very very satisfied there were 31 students or 34.4%, students who answered satisfied there were 35 people or 38.9%, students who answered enough students there were 21 students or 23.3 percent, students those who answered unsatisfied were two students or 2.2% and those who answered dissatisfied with tangibles were only one student or 1.1%. So it can be concluded that students are satisfied with academic services based on tangibles aspects provided by the SMP Al-Kautsar. This statement is supported by qualitative data based on interviews with teachers, TU staff, parents, and students that they feel delighted with the condition of the building along with the existing physical facilities and infrastructure. This satisfaction is undoubtedly very much in line with the results of interviews with the principal, where the school guarantees the availability of adequate facilities and support so that school activities can run smoothly and can reach the goals. This level of student satisfaction graph can be seen in Figure 1.

Reliability Aspect

Based on the results of the questionnaire, aspects of the reliability score showed that there were 32 respondents' quality reliability or 35.6%, answering very satisfied. Students who responded were satisfied with the academic service reliability provided by 47 respondents, or by 52.2% explained were satisfied, students who answered were quite satisfied as many as seven students or 7.8%. The number of respondents who answered unsatisfied were three students or 3.3%, and students who
answered dissatisfied were only one student or 1.1%. Thus it can be concluded that the customer satisfaction aspect of reliability is included in the Satisfied category.

This is supported by qualitative data based on interviews with school principals wherein providing Al Kautsar Junior High School services do not have specific service standards. This school refers to the vision and mission of the school, which is a reference material in achieving the goals formulated in the image and purpose. By completing the vision and mission of the school, it means that the school can provide services following the promise.

Also, based on the results of interviews with the teacher that the teacher has served students well, as well as TU staff who provide services regardless of background. Whereas based on the results of interviews with parents of students that this school has provided excellent service and by the promise, this is evident from the academic and non-academic achievements that are very prominent in SMP Al Kautsar. Not only results, but this school succeeded in producing Islamic-moral students, as stated in the vision and mission. The satisfaction level graph for this aspect can be seen in figure 2.

![Figure 2. Frequency Reliability](image)

**Responsiveness aspects**

Based on quantitative data, the results of research on 90 respondents showed the responsiveness quality of 35 respondents or 38.9%, answered very satisfied. Students who answered satisfied with the Responsiveness of academic services provided were 36 respondents, or 40.0% explained satisfied, nine students who were quite satisfied answered or 10.00%. The number of respondents who answered unsatisfied were three students or 3.3%, and there were no students who answered dissatisfied. Thus it can be concluded that the external customer satisfaction aspects of Responsiveness are included in the Satisfied category.

The statement was supported by qualitative data from interviews with the school principal stating that the school tried to provide the best possible service to all residents of the school, both teachers, staff, and students. I was trying to respond responsibly in serving the complaints and needs of all school residents. One very prominent effort is in the effort to support teacher competence and ability in teaching schools to facilitate training activities in training, workshops, and other habituation that leads to character education.

While the results of interviews with teachers in serving the needs and complaints in terms of student learning difficulties, for example, are always responsive in dealing with it and still open in helping
to overcome student problems. This is in line with the results of interviews with students stating that the teacher and staff always help students in various ways. The teacher always helps in overcoming student learning difficulties by allowing students to ask questions even outside the classroom. Likewise, with TU, staff are still responsive to serving student complaints. This statement is supported by the results of interviews with students' parents stating that the teacher and all staff are very responsive in providing services to students and always provide maximum service as the needs of students and still receive criticism and suggestions well.

Customer satisfaction in this aspect has the highest score compared to other elements. This shows that the Responsiveness of SMP Al Kautsar in providing services to its customers is very high and has been very good so that this aspect of Responsiveness is the most prominent in giving satisfaction to its customers. Furthermore, this variable histogram can be shown in the following graph. Can be seen in Figure 3.

![Responsiveness Frequency](image)

**Figure 3.**
Responsiveness Frequency

Assurance aspects

Based on quantitative data, the results of questionnaire calculations obtained Assurance quality scores, and there are 21 respondents or equal to 23.3%, answered very satisfied. Students who answered satisfied with the Assurance of academic services provided were 53 respondents, or 58.9% answered satisfied, 12 students or 13.3% responded that they were quite satisfied. The number of respondents who answered unsatisfied were four students or 4.4%, and there were no students who answered dissatisfied. Thus it can be concluded that the customer satisfaction aspect of Assurance is included in the Satisfied category.

This is supported by qualitative data based on interviews with school principals, teachers, staff, students, and parents who are also customers. The school provides services with full guarantees, the teachers and staff there are amicable, polite and soft-spoken and kind communication. Not only that, but the warranty in terms of teacher quality in teaching is also excellent. Teachers in Al Kautsar Middle School have an average minimum of S1 education, which is also supported by extensive experience and knowledge; high achieving students evidence this. That means the teachers have succeeded in delivering their students to be achievers.

The effort made by the school is by deepening the learning methods applied at Al Kautsar Junior High School through modules created by the MGMPS team, using directly through guidance,
outdoor study, and, multimedia namely VCD, DVD, IHP, LCD, TV, computers, etc. Thus the parents' trust in the quality of education provided at SMP Al Kautsar increasing because this school always provides maximum service by still making continuous improvements. The guarantee provided is not only that; this school offers guarantees for safety and comfort to all existing school residents. Furthermore, this aspect of the histogram can be shown in figure 4.

Empathy aspect

Based on quantitative data, the results of the questionnaire showed Empathy's quality score of 38 respondents or 42.2%, answering very satisfied. Students who responded were satisfied with Empathy academic services provided by 38 respondents, or 42.2% explained satisfied, students who answered were quite satisfied as many as six students or 6.7%. The number of respondents who answered unsatisfied were six students or 6.7%, and there were no students, two students, or 2.2% who answered dissatisfied.

Quantitative data is then strengthened by qualitative data based on interviews with principals, teachers, staff, parents, and students, which states that the teacher and the staff always pay attention to all of their customers, regardless of their background. Likewise, BK teachers always give more attention to all students. Furthermore, this aspect of the histogram can be shown in Figure 5.
Empathy Frequency Based on the results of $t$-test dimensions tangibles, reliability, responsiveness, assurance, and empathy, get results of $0.000 < 0.05$ can be concluded that a positive effect on service quality. Of the five aspects studied tangibles, reliability, responsiveness, assurance, and empathy that have a dominant influence on student satisfaction with academic Service Quality are responsiveness variables. The $t$-value evidences this for the responsiveness variable more significant than the count for other variables. The $t$-value of the responsiveness variable, which is higher than the $t$-table, means that partially the responsiveness variable has a real and positive influence in determining the level of student satisfaction with academic service quality.

From the research results, it is known that the level of satisfaction with the application of Total Quality Management (TQM) which is assessed from tangible, reliability, responsiveness, assurance and empathy aspects has been very satisfying in meeting the needs, desires, expectations, this is shown from the facilities, inputs, and outputs that have been good for now and for the future. This could be a reference to maintain the quality of education in SMP Al-Kausar. In line with Rahmah, which says that the application of Total Quality Management (TQM) is very influential to see the level of satisfaction and to evaluate education to improve the quality of education. (Rahmah, 2018). Supported by research that says that the application of TQM and the better and stronger organizational culture will be followed by improvements in teacher performance and the quality of education (Dewi & Primayana, 2019).

Furthermore, a study said some companies had implemented TQM that have succeeded in improving their performance, but some have not been able to improve their performance. (Aquilani, Silvestri, Ruggieri, & Gatti, 2017). TQM is an approach to maximizing organizational competitiveness with several vital elements, namely: 1) Focus on customers (internal & external), 2) Having a high obsession with quality, 3) Using a scientific approach to decision making and problems, 4) Having a long term commitment long, 5) Requires teamwork, 6) Improving the process continuously / continuously, 7) Providing education and training, 8) Providing controlled freedom, 9) Having unity of purpose, 10) The involvement and empowerment of employees (Burhanuddin, 2016). The main element is a benchmark in improving the quality of educational institutions, in particular, SMP the Al-Kausar. To support the above, four main principles are needed in the management of educational excellence, namely: a). The principle of the customer, b). Respect for everyone, c). Fact-based management, and d). Continual improvement.

Total Quality Management (TQM) is a management system that promotes quality as a business strategy. The rationale for the need for TQM is straightforward, namely that the best way to be competitive in global competition is to produce the best quality. Therefore Total Quality Management (TQM) directs the leadership of the organization and its personnel to carry out continuous quality improvement programs focused on achieving customer satisfaction. From the explanation above, it is concluded that Total Quality Management can elevate quality as a business strategy and be oriented towards customer satisfaction by involving all members of the organization.
Conclusion and suggestion

Based on the results of research conducted on the level of customer satisfaction by using the Total Quality Management method at SMP Al Kautsar Bandar Lampung, it can be concluded that the level of customer satisfaction in terms of tangible, reliability, responsiveness, assurance and empathy is very satisfying with aspects of responsiveness that are more prominent than aspects other in meeting the needs, desires, hopes. This is shown from the facilities, inputs, and outputs that are already good for now and in the future, so it needs to be maintained or improved to improve the quality of education. Henceforth, other methods are recommended to look at customer satisfaction in management education.

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References


