

The correlation between total quality management with teacher performance in special education

Aulia Maya Mufidah, Munawir Yusuf, Herry Widyastono

Department of Special Education, Postgraduate Program, Universitas Sebelas Maret, Surakarta, Indonesia
Center for Disability Study, Universitas Sebelas Maret, Surakarta, Indonesia

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ABSTRACT

Total quality management (TQM) in education is a management theory that directs service providers to carry out quality improvement programs on an ongoing basis that focuses on achieving customer satisfaction in improving the quality of learning. This aim study analyzed the relationship between total quality management and teacher performance in special education. This research used correlational research with a quantitative methodology. Data analysis techniques in this study were instrument tests (validity and reliability). The sample consisted of 132 respondents, including school principals and teachers. Data collection used questionnaires. The quantitative descriptive analysis technique was then applied to the data. The product-moment correlation was used in the hypothesis testing. The findings demonstrated a strong and favorable correlation between teacher effectiveness and overall quality management.

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Corresponding Author:

Aulia Maya Mufidah
Department of Special Education, Postgraduate Program, Universitas Sebelas Maret
Ir. Sutami 36 Street, Kentingan, Jebres, Surakarta, Central Java, 57126, Indonesia
Email: auliamayamufidah@student.uns.ac.id

1. INTRODUCTION

The main agenda of education to compete in the 4.0 era is to develop and improve the quality of education in Indonesia [1], [2]. The revolution 4.0 age has caused a paradigm shift in how people think and operate, which has an impact on the demand for qualified and high-quality resources [3]. The quality of learning is the key to the quality of education, where students are associated with teacher performance in the learning process [4]. The cause of low education in Indonesia is too much focus on results, bureaucracy, and the role of school members, especially teachers [5], [6]. Therefore the quality of learning must be continuously improved, thus the quality of learning for teachers in special education school (SLB).

Educational institutions, including special schools, must provide the best service to students. For this reason, it is necessary to support a sound management system, an awareness to develop continuously, regular implementation, attitudes, and so on. A management system called total quality management (TQM) is a program to meet its customers' needs, desires, and expectations, now and for the future [7]. Before this, all parties involved in the education process, from school committees, school principals, administrative heads, teachers, and students to employees, must understand the nature and goals of education [8]. The implementation of Total quality management has a good effect because it involves the entire school to focus on customers [9]. Even so, there are several obstacles, such as the fact that TQM is not a tool that can be used and used, but is part of the organizational culture, which every part must carry out and everyone in the organization [10].

Teacher competence and creativity are needed for educational institutions because competent teachers realize the success of educational goals. As a strategy, the teacher equates understanding between school and at home by supervising children through closeness to student guardians [11], [12]. The adoption of TQM has an impact on educators' dedication to making ongoing enhancements to raise the standard of instruction [13]. Teacher performance is the teacher's ability to carry out actions according to predetermined goals, including lesson planning, implementation of learning, creation, and maintenance of optimal classes, optimal control of learning conditions, and assessment of learning outcomes [14].

At junior high school of Muhammadiyah Boarding School Jombang, organizational culture and quality management have an impact on teacher performance [15]. TQM is a reference for managing quality-based educational institutions in all processes, services, human resources (HR) presence, and results [16]. This management is a strategy that is implemented continuously by involving all school members [17]–[19].

TQM is an effort to create a quality culture that encourages all staff members to satisfy customers, TQM can create a quality culture where each team wants to please customers and the organizational structure in the team gets full authority to do things according to what the team wants [20]. The method used in managing humans in an organization is carried out continuously and oriented to the goal of customer satisfaction with more activities that are carried out on an ongoing basis [10]. We found that TQM correlates with teacher performance.

Components in TQM, according to Firdaus *et al.* in [21], have ten main elements, namely: i) customer-centeredness, ii) obsession with quality, iii) scientific method, iv) long-term dedication, v) collaboration, vi) continuous quality improvement system, vii) instruction and training, viii) restricted freedom, ix) objective unity, and x) teacher and administrative staff participation and empowerment.

TQM involves teacher performance in conducting learning. Learning between teachers and students is closely related to the preparation, implementation, and assessment of learning. Teacher quality also requires development from school management, such as continuous training and development [22]–[24]. It can give direction to the teacher so that the teacher can convey lessons more excitingly and easily to understand [25]. This study investigated the effects of TQM with teacher performance. While earlier studies have explored the impact of TQM, they have not explicitly addressed its influence on teacher performance.

2. METHOD

The approach is quantitative and makes use of data collection methods in the form of questionnaires from instrument tests (validity and reliability). The subjects in this study were 132 respondents, including school principals and teachers from 13 special education. The research instrument is TQM with five aspects which include obsession with quality, customer satisfaction (students), continuous improvement/sustainable quality improvement, teamwork, and there is involvement and empowerment of teachers and administrative staff. Teacher performance with three aspects which include preparation, process, and evaluation of learning. The sample was determined using the calculation formula of Isacc and Michael. The data were analyzed quantitatively using product moment correlation analysis. Product moment correlation analysis was used to do a quantitative examination of the data.

- Validity and reliability test

The research instrument was validated by experts and then tested for internal validity using statistical package for the social sciences (SPSS) with the Pearson product moment correlation technique. The two-tailed test with a significance threshold of 0.05 is used for internal validity assessment. The validity of the questionnaire for data collection was assessed using a validity test. Using SPSS version 23, the bivariate person correlation model was employed for the validity test. At a significance level of 5%, the questionnaire items in the validity test were deemed legitimate if $r_{\text{count}} > r_{\text{table}}$. On the other hand, at a significance level of 5%, the validity test questionnaire items are considered invalid if $r_{\text{count}} < r_{\text{table}}$. There are 40 items related to teacher performance and 50 integrated quality management items in the variable X questionnaire. Table 0.195 is produced for $n=132$ with a significance level of 5% (0.05). Because each assertion has a $r_{\text{count}} > r_{\text{table}}$, the SPSS validity test demonstrates that each statement is true. The Cronbach Alpha formula was then used to conduct the reliability test as shown in Table 1. At the significance level of $\alpha=0.05$, the significant test was conducted. If the alpha value is greater than the r_{table} for the Y variable (0.195) and the r_{table} for the X variable (0.195), the instrument is considered dependable. The findings of the reliability test yielded a reliability coefficient value of 0.759 for the teacher performance questionnaire and 0.753 for the integrated quality management questionnaire. It is possible to determine that all of the study's questionnaires are trustworthy or consistent enough to be employed as research tools based on the reliability coefficient value.

Table 1. Instrument reliability test

Variable	r count	r 5% (100)	Notes
Total quality management	0.753	0.195	Reliable
Teacher performance	0.759	0.195	Reliable

3. RESULT AND DISCUSSION

3.1. Descriptive analysis

The acquisition of TQM scores from most respondents is moderate, namely from 62 respondents (51%). There were 51 respondents (39%) in the high category and 19 respondents (15%) in the very high category. The most TQM analysis obtained is the moderate category; this is additional information on aspects of customer satisfaction that are the lowest from several other elements. In fact, in TQM, customer satisfaction should be highlighted the most. This aligns with Sallis' opinion that TQM focuses on customer satisfaction [26].

The score on teacher performance consisted of 9 respondents (6%) in the very high category, 63 respondents (47%) in the high category, and 60 responses (45%) in the medium category. Between medium and high types are almost the same. This can happen because, in the aspect of the learning process, several teachers still do not focus on children but are more focused on teachers so that students are less able to explore the problems and needs of each student. Given the characteristics of students with special needs, they have their characteristics. This is in line with Mufidah *et al.* opinion [27] that the features of students with special needs are very diverse, especially in Special Schools, as teachers are expected to be able to know the exact needs of their learning.

3.2. Prerequisite test

The normality, linearity, and multicollinearity tests made up the prerequisite analysis test. The data distribution is considered normal since the Kolmogorov-Smirnov test, which was utilized for the normality test, yielded a result of $P > 0$. When $p > 0.05$ and the value of the F Fcount r table was present, the linearity test employed the F coefficient test with guidelines. The distribution of the data is deemed to be normally distributed since the p-value for the variable TQM is 0,200, or $0.200 > 0.05$, according to the computation. The teacher performance variable's p-value is 0.00, indicating that the sample is normally distributed ($0.000 > 0.05$).

3.3. Hypothesis test

TQM has the quality of planning on the quality of teacher performance to support learning in schools. Schools with a high level of TQM have a high level of teacher performance. The following is an explanation in Figure 1.

		Total quality management	Teacher performance
Total quality management	Pearson Correlation	1	.586**
	Sig. (2-tailed)		.000
	N	132	132
Teacher performance	Pearson Correlation	.586**	1
	Sig. (2-tailed)	.000	
	N	132	132

** . Correlation is significant at the 0.01 level (2-tailed).

Figure 1. Correlations between TQM and teacher performance

Based on the picture above, since the p-value's significance value is 0.000 (0.05), the old hypothesis (H_0) should be rejected. Thus, there is a relationship between teacher performance (variable Y) and TQM (variable X). The correlation coefficient is 0.586, indicating a moderate degree of relationship strength and a positive form. If TQM is high, then teacher performance is also high. Conversely, if TQM is low, teacher performance is also low. TQM to teacher performance in schools [28]. In line with the opinion of [29] that

there is an influence between school management and teacher performance, if management is good, then teacher performance is also good. Good TQM will trigger the efforts to achieve teacher quality or professionalism at work [23]. Teacher planning in carrying out satisfactory performance with continuous communication. Supervision of teacher performance is also expected to be carried out continuously to serve students so that TQM will pay attention to continuous improvement. That is, educational institutions should improve a fixed goal. TQM requires the support of school principals as leaders as well as managers who provide support to teachers to work totally in organizing education in the hope that their performance can provide satisfaction to students and parents of students.

Implication TQM would be useful to both decision-makers and researchers. The TQM elements mostly can be prioritized, and adopted, and identify potential for improvement of teacher performance. However, researchers or decision-makers should bear in mind that the teacher performance of the TQM elements concerns both the students [30]. If teacher performance goals are set out and linked to individuals' goals, everyone can work towards the successful outcomes of these plans [31]. Teacher with clear objectives are far more motivated to execute their duties well and show more job satisfaction than those without them.

Research on TQM in special education has not been widely discussed, and at SLB YPAC Pangkalpinang, the quality of service needs to meet better service standards [32]. Also, in the research of [33], education management at SLB Negeri 1 Lima Kaum needs to run optimally in curriculum management, infrastructure management, and management of educators and teaching staff. Thus, various studies still show that implementing education quality management requires multiple supports from different parties, especially the school.

The finding of teacher performance results that are still in the moderate category is in line with the opinion of several journals, specifically the poor caliber of educators who lack the professionalism necessary to perform their jobs, which include lesson design, putting learning into practice, evaluating learning outcomes, providing mentoring, giving training, conducting research, and performing community service. Teachers who have low performance will have a bad influence on schools and customers (students). The current reality is that the quality of teacher performance has not been met. Many teachers think that teachers carry out their duties only as routine activities. More than that, the community or students' parents sometimes accuse teachers of being incompetent, of low quality, and so on, when their sons/daughters cannot solve their problems or have abilities that do not follow their wishes.

Integrated quality management is expected to have the quality of planning on the quality of teacher performance to support learning in schools. It can be seen that schools that have a high quality of integrated quality management have a high quality of teacher performance. Teacher planning in carrying out satisfactory performance with continuous communication. Supervision of teacher performance is also expected to be carried out continuously to serve students so that integrated quality management will pay attention to constant improvement. That is, educational institutions should improve a fixed goal. Integrated quality management requires the support of school principals as leaders and managers who support teachers to work totally in implementing education in the hope that their performance can provide satisfaction to students and parents of students.

4. CONCLUSION

TQM is a way to improve education quality because it focuses more on customers. There may be a relationship between teacher performance and overall quality management, according to recent observations. Our findings provide conclusive evidence that this proposed learning method is associated with the degree relationship is favorable in nature and has a moderate level of interaction. The relationship is good in form and has a reasonable degree of intimacy. It is clear that there is a one-way relationship between teacher performance in special education units and overall quality management.

This research can serve as a source of information for related investigations. Despite being useful in practice for school management procedures. Teachers and schools will find it easier to implement school management by using total quality management.

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BIOGRAPHIES OF AUTHORS






Aulia Maya Mufidah    is a student in Magister of Special Education Universitas Sebelas Maret. She gained her bachelor's degree from Universitas Sebelas Maret. Her research interests are included in strategic education, inclusion, and people with disability. She is on staff at the Center for Disability Studies, LPPM UNS. She can be contacted at email: auliamayamufidah@student.uns.ac.id.



Munawir Yusuf    is a professor in Universitas Sebelas Maret. He is a lecture in the Faculty of Teacher Training and Education and Faculty of Psychology. He is the head of the Center for Disability Studies, LPPM UNS. His research interests are included in inclusion, people with disability, education management, curriculum, and special education. He can be contacted at email: munawiryusuf@staff.uns.ac.id.



Herry Widayastono    is a lecture in the Departemen of Teacher Training and Education. His research interests are included in people with disability, education management, curriculum, and special education. He is on staff at the Center for Disability Studies, LPPM UNS. He can be contacted at email: herrywidayastono59@gmail.com.