

Relationship Aspects Total Quality Management Towards the Satisfaction of Lecturers in the Independent Era of Learning - Independent Campuses in Indonesia

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Abstract

The Indonesian government in 2020 implemented the Independent Learning-Independent Campus (MBKM) policy, namely the Independent Learning-Independent Campus Policy where students are allowed to study for 3 semesters outside their study program. Lecturers play an important role in the implementation of MBKM policies. Therefore, it is important to know the factors that influence lecturer satisfaction in the implementation of MBKM. These factors are part of the soft Total Quality Management (TQM) concept which is responsible for lecturer satisfaction. This research takes a case study at the Indonesian Institute of Technology (ITI). The purpose of this study was to determine the effect of soft TQM practices on lecturer satisfaction in implementing MBKM policies. The soft TQM aspects studied are: (1) top management commitment; (2) team work; (3) lecturer empowerment; (4) training; and (5) culture. Respondents as many as 70 lecturers where only 58 valid questionnaires. Multiple regression method was used to examine the relationship between all aspects of soft TQM and lecturer satisfaction. The results showed that the variables that leveraged the satisfaction of lecturers in implementing MBKM were lecturer empowerment, top management commitment and teamwork. But cultural factors and training are not leverage for lecturer satisfaction. The results also show that top management commitment, teamwork, lecturer empowerment, training and culture simultaneously have no effect on lecturer satisfaction.

Keywords

Total Quality Management, MBKM, Lecturer Satisfaction, University

1. Introduction

Creativity and innovation are essential to ensure sustainable human development. As competition get fiercer, universities should prepare the students who are currently studying in higher education to become real learners who are skilled, flexible and tenacious (agile learners). The Indonesian government in 2020 implemented the Independent Learning Policy - Independent Campus (MBKM). This policy aims to prepare students to become strong scholars, relevant to the needs of the times. Students are allowed to study for 3 semesters outside their study program (Direktorat Jenderal Pendidikan Tinggi Kementerian Pendidikan dan Kebudayaan, 2020). Through MDKM, students have opportunities to enrich their insight and competence because learning can take place, not only in campus but also everywhere outside campus. This paradigm change certainly has an impact on the management practices of education in universities. In order to succeed the of the policy, various important factors should be considered, including: how the top management committed to support the implementation of the policy, synergy of internal and external teamwork, empowerment of lecturers in implementing the policy, the need for training to understand the policy, and cultural changes in the teaching and learning process. These factors are part of the soft TQM concept.

TQM is very important in order to lead to competitive advantage (Amin et al. 2017). Colleges are complex organizations that operate in a dynamic, diverse and ever-changing environment with shifting values (Bess and Jay, 2008). That is why TQM is also necessary and has been applied in universities. TQM has an increasingly important role in the global market, because TQM has an important aspect to create job satisfaction. The objective of TQM is customer satisfaction through employee satisfaction (Bari et al. 2016).

Lecturers among others are the key in the success of the teaching and learning process in universities. Lecturer satisfaction should be considered in order to increase the competitiveness of universities, because lecturers who are satisfied with the institution will produce good performance (Chaturika and Dileepa, 2016), which in turn will improve their services to students (Theresia, L. et al, 2017). Linking TQM and lecturer satisfaction (Bari et al., 2016; Thiruchelvi and Palanichamy, 2017) has been carried out, but it has limitations in terms of scope when policy changes. This study contributes with case studies. in developing countries, especially in Indonesia with changing environment of teaching and learning practice during the MBKM era.

Case study at the Indonesian Institute of Technology, one of the universities that has practiced TQM through a quality assurance system and has implemented MBKM. The unit of analysis of this research is based on the perspective of the lecturer, where most of the research is centered on the management perspective. This is important, because lecturers are one part of the key to the success of MDKM implementation in Indonesia. Thus, this research is expected to provide input to enhance the effectiveness of TQM in relation to MBKM policies. Various elements of soft TQM directly affect lecturer satisfaction. In this study, the five aspects of soft TQM are the commitment of top management, lecturer empowerment, teamwork, capacity building and culture have been selected as independent variables. The five aspects of soft TQM are very important to improve lecturer performance in the implementation of TQM programs (Chaturika and Dileepa, 2016). The purpose of this study was to investigate what is the impact of the practical implementation of soft TQM on lecturer satisfaction in the MBKM policy era. Thus, it is hoped that the performance of the lecturers can be improved as a result of the application of the soft TQM aspect (Sweis et al., 2019).

2. Literature Review

2.1. TQM

TQM can be viewed in terms of soft and hard. The soft side of TQM elements is associated with leadership, human resources related such as capacity building, teamwork, etc. while the hard element of TQM refers to the tools, equipment and techniques used for quality improvement. TQM practices will primarily affect the performance which is soft and then it affects hard one. So that, soft TQM is very important to increase job satisfaction which has an impact on increasing employee commitment in implementing the TQM program (Chaturika and Dileepa, 2016).

TQM has 3 important elements, namely: total, quality and management. Total, indicating that everyone in the organization should be involved in Quality Management (QM); Quality indicates the level of excellence of the services provided; and management states how the organization handles, controls and directs to achieve it. TQM is closely related to human resources which were the key in the success of the implementation of organizational strategy (Chaturika and Dileepa, 2016), so lecturer satisfaction is an important factor to pay attention to. Thus, soft TQM elements become very important.

Implementation of TQM will enhance the quality of products and services. Previous research showed that the constructs of soft TQM aspects accounted for 74% of the variance of employee job satisfaction. The research also showed that individually each variable of soft TQM aspects affects employee job satisfaction significantly.

2.2. TQM and Job Satisfaction

One of the main foundations of TQM is employee satisfaction, because satisfied employees are a prerequisite for desired business success (Dedy et al., 2016). Employees in this case are internal customers in the organization and employee satisfaction is an important factor to improve the quality of the organization (Ooi et al., 2007) and Addis et al. (2019). Several TQM indicators that are operationalized for Human Resources performance, among others are satisfaction, motivation, commitment and achievement of employees. In this study, the indicators reviewed are employee job satisfaction, and the three most popular aspects of soft TQM to measure job satisfaction namely top management commitment, employee empowerment, and team work, have been chosen because those aspects become a substantial focus by many authors (Bari et al., 2016; Thiruchelvi and Palanichamy, 2017). Besides these three aspects, training and cultural factors also play an important role in employee job satisfaction. Previous research by Bari et al. (2016); Jian (2010) indicates that the application of soft TQM elements is positively related to employee job satisfaction (Chaturika and Dileepa, 2016). TQM practices and employee job satisfaction are closely related (Alsughayir, 2014).

2.3. Top Management Commitment

Top management commitment is one of the main determinants for the successful implementation of TQM (Bari et al. 2016). In the TQM program, several aspects of top management commitment should be clearly described, including inculcation of values and goals related to the quality improvement; conveying the philosophy that quality is the top priority; and allocation all necessary resources for TQM implementation. The leaders who show trust in employees will motivate employees to improve their performance. This will result in the willingness of employees to put forth full effort in their work.

The relationship between leadership commitment, employees, and the effectiveness of the TQM program is very close, this is because when an organization wants to improve its performance, the organization must get full commitment from all members of the organization. Many studies have empirically proven the positive impact that shows leadership support on aspects of soft TQM increasing employee job satisfaction (Bari et al. 2016). Aspects of soft TQM that play an important role are top management commitment, employee empowerment, teamwork, training and education, and employee involvement. The research done by Addis et al. (2019) showed there is a significant relationship between top management commitment and employee job satisfaction.

2.4. Employee Empowerment

In TQM, to empower employee in general can be done in two ways. First, encourage employees to be responsive to increase quality. Responsive to enhance the quality means taking the initiative to solve problems, delegate authority and allocate appropriate resources. Moreover, it eliminates rigid and bureaucratic controls when employees have rights to express their ideas, take decisions, and at the same time should responsible for the results.

The failure of TQM is mainly caused by inadequate empowerment, lack of implementation continuous training and also work environment which is not conducive. Besides, the failure of TQM is also caused by leaders who are less successful in increasing employee confidence in carrying out their work. The research done by Thiruchelvi and Palanichamy (2017) showed that employee empowerment significantly related to employee satisfaction. Other research done by Abuaraki and Abdalla (2021) found that the job satisfaction of employees is much influenced by their empowerment, which is one aspect of soft TQM. This is in line with research done by Addis et al. (2019) and Laseinde et al. (2019), which conclude that empowerment of employees significantly affect their job satisfaction.

2.5. Teamwork

Teamwork is important in TQM. Oakland and Oakland (1989) state that teamwork can build trust, improve communication and develop interdependence (Thiruchelvi and Palanichamy, 2017). With teamwork, management tries as much as possible to remove barriers between workers. That is why teamwork can be said one of the very important factors to make sustainable improvement.

Teamwork can facilitate collaboration of employees in their efforts to solve problems faced including quality. It also has the potential to reduce individual errors by providing opportunities for information sharing within work groups. Good teamwork will also increase work effectiveness. Teamwork can be considered as a dominant factor in TQM practice, because it significantly related with employee job satisfaction which affects organizational performance. Teamwork plays important role to create good partnership between workers and managers which ultimately increases employee job satisfaction (Anschutz, 1995). It was found that there was a positive relationship between teamwork and job satisfaction (Ooi et al., 2007), Bari et al. (2016)) and Laseinde et al. (2019).

2.6. Training

Management should encourage employees to participate in the training programs which are very valuable as long-term resource. Therefore, employees deserve training throughout their careers. Capacity building through training significantly related to job satisfaction of employees. Training will help employees to expand their knowledge and capacities and help employees acquire the skills and knowledge needed to do their jobs. Training could enhance job satisfaction (Jun et al. (2006). However, although the majority of empirical studies showed that there was significantly positive effect of training on employee job satisfaction, such as the research done by Jun et al. (2006); Karia and Asaar (2006); Bari et al. (2016); Kabak et al. (2014), there were also found that several researches with opposite finding, where training has significantly negative effect on employee job satisfaction, such as the research done by Batista et al. (2013) and Chang et al. (2010).

2.7. Culture

Although lot of conceptual and theoretical studies highlight its importance, cultural factors in TQM still receive less attention (Bari, 2016). Meanwhile, paradigm shifts of the educational practice in MBKM policy, cultural is an important thing to study in order to enable MBKM implementation run properly. TQM encourages employees to work together in cross-departmental teams which will increase their sense of togetherness in accomplishment of their work assignments and result in the enhancement of their personal responsibility (Mohrman et al., 1996)). Various studies provide empirical evidence of the relationship between soft TQM practices and employee performance as indicated by employee job satisfaction (Thiruchelvi and Palanichamy, 2017). Job satisfaction can be defined as a positive or pleasant emotion that is felt as a result of an assessment of one's work performance (Locke, 1976, cited in Chaturika and Dileepa, 2016). Various factors determine the level of employee satisfaction, such as the benefits obtained either financial or non-financial such as career growth, promotions, and work environment. In this study, lecturer satisfaction is viewed from the aspect of soft TQM which consists of: top management commitment, lecturer empowerment, training, teamwork and culture. The conceptual framework and hypotheses which were built by referring to the previous researches done by Abuaraki and Abdalla (2020) and Theresia et.al (2018) are illustrated in Figure 1. This framework consists of the main constructs of soft TQM practices, namely; top management commitment, lecturer empowerment, training, teamwork and culture as independent variables, and lecturer satisfaction as the dependent variable.

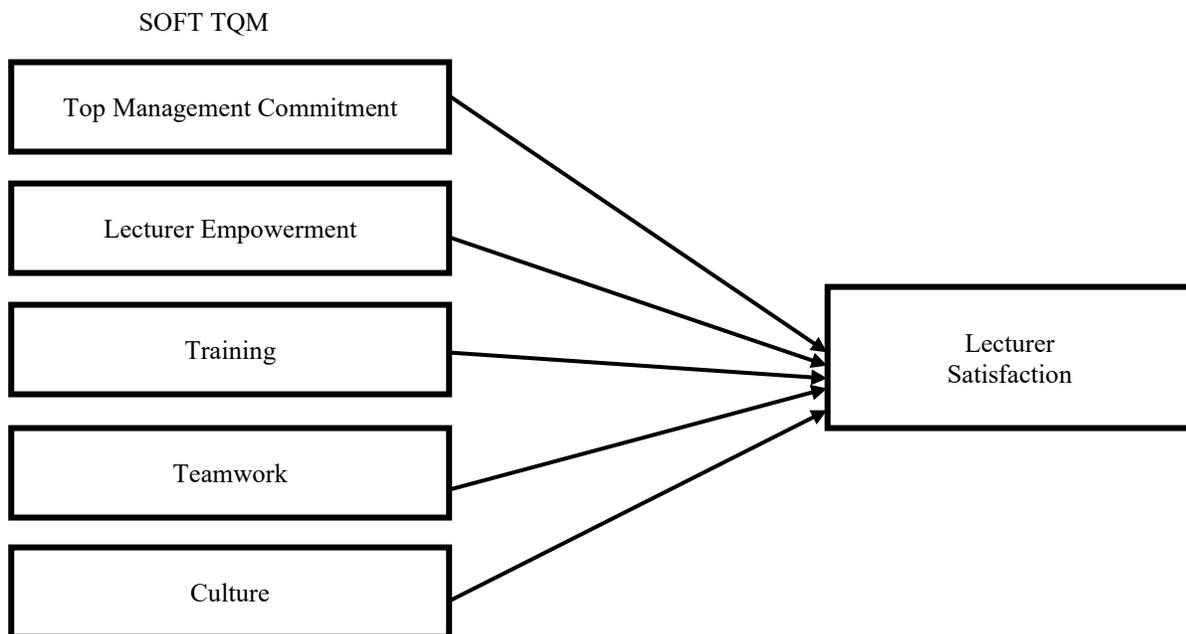


Figure 1. Conceptual Model

The hypothesis that is built is as follows:

- H₀: All soft TQM aspects do not affect lecturer satisfaction.
- H_{0a}: Top management commitment has no relationship with lecturer satisfaction.
- H_{0b}: Lecturer empowerment does not affect lecturer satisfaction significantly.
- H_{0c}: Training and education does not influence lecturer satisfaction significantly.
- H_{0d}: Teamwork and lecturer satisfaction has no relationship.
- H_{0e}: Culture does not affect lecturer satisfaction significantly.

3. Methods

This research is a cross sectional study, where primary data are collected at a certain time, which was from January 1, 2022 to January 31, 2022 by using questionnaires as the instrument. Other resource such as journals, books and university records are used as secondary data. This research is explanatory research with quantitative method by

relying on hypothesis testing to examine relationship between dependent and independent variable. Moreover, the research is also a case study at Institut Teknologi Indonesia (ITI), a private university located in Banten Province, Indonesia. The reason for selecting ITI in this study was because ITI has implemented the MBKM policy and also TQM organization.

Although there are 94 ITI lecturers, only 70 questionnaires were sent back and only 58 questionnaires were valid. The questionnaire contains 18 items to measure the aspects of soft TQM adapted from previous research using Likert scale. The top management commitment and the employee empowerment, each one consists of 4 items, were adapted from Jun et al. (2006). The dimensions for measuring teamwork were taken from Morrow (1997) with 4 items. The research done by Zhang et al. (2000) on training, consisting of four items was used. Cultural aspect was measured with 4 items. Each questionnaire consists of two parts, namely aspects of soft TQM as independent variable and lecturer satisfaction as dependent variable. Some researches (Guest, 1999; cited in Karia and Asaari, 2006), uses individual lecturer as unit of analysis because individual perceptions can provide a new stimulus for discussions about the effectiveness of soft TQM, which directly affects individual performance as university lecturers in the MBKM era.

Descriptive statistics was used to describe the profile of the respondents. Multiple regression method was used to examine the relationship between all aspects of soft TQM and lecturer satisfaction. Multiple regression is a useful technique for analyzing the relationship between one dependent variable and several independent variables at a time (Moore and Roberts, 1989; cited in Karia and Asaari, 2006). Therefore, the multiple regression method has been chosen to test the hypothesis in this study because it is in accordance with the research conceptual framework and related hypotheses. There are several prerequisites should be fulfilled previously in order that regression methods can be used. The prerequisites are linearity, absence of collinearity, independence and normality

4. Data Collection

ITI lecturer respondents amounted to 70 people, and only 58 valid questionnaires. The results of processing respondent profile data are as follows (Table 1):

Table.1 Respondent Profile.

Variable	Category	Frequency	%
Gender	Male	27	46,60%
	Female	31	53,40%
	Total	58	100,00%
Age Group	25 - 34 Years	9	15,52%
	35 - 44 Years	7	12,07%
	45 - 54 Years	10	17,24%
	More Than 54 Years	32	55,17%
	Total	58	100,00%

5. Result and Discussion

5.1. Instrument Validity and Reliability

Instruments Construct validation is an important step in any research, which aims to determine whether the literature review has content validity or internal validity (Forza, 2002; Bryman, 2001). To test the validity of the construct Confirmatory Factor Analysis (CFA) is used. This test is carried out with the Kaiser–Meyer–Olkin adequacy sample size, where if the loading value > 0.55 means it meets construct validation.

Table 2. Instrument Validity and Reliability

No	Variable	Loadings	Cronbach's α	KMO
1	X1.1: Leaders actually direct lecturers to be committed to the quality of learning	0,779	0,850	0,829
	X1.2: Leaders view quality as important as cost so that the alumni produced must be in accordance with the market's	0,820		
	X1.3: Leaders and their staff are clearly and explicitly committed to the quality of the learning process for independent learning	0,809		
	X1.4: Leaders allocate adequate resources for efforts to improve quality of the independent learning process	0,828		
2	X2.1 : University has implemented a training system for lecturers well, especially related to independent learning.	0,769	0,870	
	X2.2 : Various training programs have been planned by the leadership every year	0,812		
	X2.3 : Training opportunities for every lecturer are wide open	0,865		
3	X3.1 : My work unit uses teams to solve problems	0,847	0,885	
	X3.2 : The organization has adopted the team concept	0,880		
	X3.3 : Many work problems are now being solved through team	0,817		
	X3.4 : During team meetings, we make an effort to get all team members' opinions and ideas before making a decision	0,867		
4	X4.1 : I am provided with substantial autonomy and responsibility	0,802	0,854	
	X4.2 : I am encouraged to develop new ways to provide better	0,792		
	X4.3 : I was given sufficient direction related to learning in order to improve student competence	0,829		
	X4.4 : I am given a good award if I succeed in improving the learning process well	0,835		
5	X5.1 : Lecturers are allowed to make decisions and make improvements in the teaching and learning system of independent learning campuses	0,879	0,882	
	X5.2 : The independent learning program provides space for lecturers to improve the quality of the learning process according to their competence	0,794		
	X5.3 : Culture of creativity is encouraged in changing the free learning system	0,793		
	X5.4 : I accept the free learning system as a learning process that improves student competence	0,900		

Table 2 show the value of loading factors are greater than 0.55, so that the requirement for validation is met, thus the validity of the process can be accepted. According to Surienty et al. (2014) which was cited in Bari et al. (2016) the consistency of factors can be measured by using reliability instruments. Mihail and Kloutsiniotis (2016) which was cited in Bari et al. (2016) stated that to be consistent, all heterogeneous but similar items, shown by Cronsbach's alpha, must have reliability value greater than 0.70. As shown in Table 2, all variables have Cronbach's alpha scores above the minimum threshold of 0.70. Since Cronbach's alpha values for all measurement items are more than 0.70, the requirement for internal consistency of the items used for measurement has been met.

5.2. Mean, Standard Deviations of Dependent and Independent Variables

The variable that has the highest average, which indicates the most influential variable to determine the success of implementation soft TQM practice in their organization is top management commitment ($M = 4.16$, $SD = 0.79$) (Table 3). The second and third highest variable is training and culture, where the lecturer considers both of them to have been implemented well because they have the same average score ($M = 4.08$) with $SD = 0.84$ and $SD = 0.71$. ($M = 3.58$, $SD = 0.92$), is the lowest average score, this shows the variable of lecturer empowerment is less practiced in the organization. Meanwhile, the impact of the practice of implementing soft TQM on the overall job satisfaction of lecturers shows $M = 3.98$ with a standard deviation ($SD = 0.76$), which indicates that the results of soft TQM the practice in this organization have been good.

Table 3. Mean, standard deviations of dependent and independent variables

Variable	Mean	Std. Deviation	N
Top management commitment	4,1552	0,79033	58
Lecturer Empowerment	3,5862	0,91832	58
Training	4,0862	0,84364	58
Teamwork	3,9828	0,71307	58
Culture	4,0862	0,70796	58
Lecturer Satisfaction	3,7241	0,76761	58

5.3. Analysis

In this research, multiple regression is used as the tool for analysis. To use regression analysis, several prerequisites must be fulfilled so that the regression model is valid, namely normality, multicollinearity and autocorrelation.

a. Normality test

To perform normality test, the Kolmogorov Smirnov (K-S) statistical test can be carried out (Ghozali, 2018). The residual value can be said to be normally distributed if the results obtained are > 0.05 . Table 4 below shows a significance value of 0.856 which is more than 0.05.

Table 4. Kolmogorov Smirnov test (K-S)

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	0,067	58	.200*	0,988	58	0,856

b. Multicollinearity test

Multicollinearity test aims to avoid relationship between the independent variables and the dependent variable being disturbed if there is correlation among independent variables. In a regression model, no matter how good it is, there should be no perfect or even near perfect without correlation between the independent variables. If the tolerance value is less than 0.1 and VIF > 10 , it can indicate the presence of multicollinearity. Table 5 below shows the that all of the VIF (Variance Inflation Factor) values are less than 10 and all of the Tolerance Values are greater than 0.1, which means that there is no multicollinearity.

Table 5. Multicollinearity test

Model	Variable	Collinearity statistics	
		Tolerance	VIF
1	Top management commitment	0,601	1,663
	Lecturer Empowerment	0,428	2,338
	Training	0,424	2,357
	Teamwork	0,359	2,786
	Culture	0,362	2,762

c. Autocorrelation Test

The autocorrelation test was conducted to test whether in the linear regression model there is a correlation between the confounding error in period t and the confounding error in period t-1 (previous). A good regression model is if there is no autocorrelation problem. The test method to examine the presence of correlation between cofounding error, the Durbin-Watson test (DW-test) can be used. If DW value falls is between -2 and +2, which means greater than -2 and less than +2, it indicates that there is no autocorrelation. From Table 6 we get the magnitude of the DW value equal to 1,955. This indicates that there is no autocorrelation problem in the data (Table 6).

Table 6. Durbin-Watson Test

F statistic	22,706		pValue= 0,101
Adjusted R square	68,60%		
Durbin-Watson	1,955		
Top management commitment	$\beta = -0,382$	t-test=3,81	p-Value= 0,00
Lecturer Empowerment	$\beta = 0,241$	t-test=2,02	p Value= 0,04
Training	$\beta = -0,048$	t-test=-0,39	p-Value= 0,23
Teamwork	$\beta = 0,370$	t-test=2,85	p-Value= 0,69

Culture	$\beta = 0,012$	t test= 0,09	p-Value= 0,92
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5.4. Finding of Multiple Regression

Table 6 illustrates the coefficient of determination (R Square or R²) for the relationship between the five soft TQM simultaneously as independent variables and lecturer satisfaction as dependent variable. To test the effect of independent variables on the dependent variable simultaneously, the F test is used. The F test is used to determine whether the independent variables have a significant effect on the dependent variable. The hypotheses built are:

H₀: all variables of soft TQM aspects simultaneously has no positive effect on lecturer satisfaction.

H₀ will be accepted if p-Value is greater than 0.05. Table 6 shows the p-Value is 0.101, which is greater than 0.05. It indicates H₀ will be accepted. This means that all variables soft TQM simultaneously do not have a significant effect on lecturer satisfaction.

The results of the null hypothesis based on the t-test at a significance of 5%. The limit of t-test value is 2.007. If t-test value is greater than 2.007, then hypothesis rejected. The results of t-test calculation can be seen in Table 6, as follows:

1. H_{0a} states that the soft TQM aspect of top management commitment does not have a positive effect on lecturer satisfaction. The results show that the top management commitment variable has a value of t = 3.81 which was greater than 2.007. Thus, the hypothesis H_{0a} is rejected which means that top management commitment has positive influence on lecturer satisfaction.
2. H_{0b} states that lecturer empowerment does not have a significant effect on lecturer satisfaction. The results showed that lecturer empowerment had a t value 2.02 which was greater than 2.007. Thus, the hypothesis H_{0b} is rejected and it means that lecturer empowerment has a significant influence on lecturer satisfaction.
3. H_{0c} states that training does not have a significant effect on lecturer satisfaction. The results show that the soft TQM training variable has a value of t count = 0.381 which was less than t-table 2.007. As the t-test is less than t-table then H_{0c} is accepted which mean we do not have enough evidence to state that training has significant effect on teacher satisfaction.
4. H_{0d} states that teamwork does not have a significant effect on lecturer job satisfaction. The results showed that the teamwork variable has a t value = 2.85. Therefore, the hypothesis H_{0d} is rejected which states that teamwork has a significant effect on lecturer satisfaction.
5. H_{0e} states that culture does not have a significant effect on lecturer satisfaction. The results showed that the culture variable had a t-count value = 0.09 which was less than 2.007. Thus, the hypothesis H_{0e} is accepted, which mean we do not have enough evidence to state that training has significant effect on teacher satisfaction.

The research findings show that the variables of top management commitment, lecturer empowerment, training, teamwork, and culture simultaneously do not have a positive effect on lecturer satisfaction. This result is different from the findings of previous research done by Jian (2010) which states otherwise. The findings of this study explain that the aspects of soft TQM at Institut Teknologi Indonesia that are most important in explaining lecturer satisfaction are top management commitment, lecturer empowerment and teamwork. Lecturer satisfaction is important because it affects motivation (Theresia, L. et.al., 2018) and motivation will encourage lecturers to improve their performance, especially in the MBKM learning process.

5.5. Discussion

One of the main foundations of TQM is the satisfaction of employees, because satisfied employees are one of the key factors to promote business success (Dedy et al., 2016). Employees can be considered internal customers in an organization and when employees are satisfied, quality can be expected improved (Addis et al. (2019). Various studies investigating the relationship between aspects of soft TQM and employee job satisfaction in developing countries have been carried out (Addis et al., 2019; Ooi et al., 2007) However, there is very limited research on TQM and lecturer satisfaction in implementing MBKM policies. This research is important because it can be expected that lecturer satisfaction can increase through practical adoption of TQM aspects (Sweis et al., 2019), especially that implementation MBKM policy in Indonesia was quite new, it just start implemented in 2020. Thus, this study aims to close the gap.

Multiple regression findings confirm that top management commitment, lecturer empowerment, training, teamwork, culture simultaneously have no positive effect on lecturer satisfaction. Thus, the five soft aspects of TQM simultaneously do not affect the level of lecturer satisfaction in the MBKM era. The results of this study are not in

line with the views of Alsughayir (2014) which states that there is a strong relationship between organizations that adopt TQM practices and the job satisfaction of their employees. The results of this study also do not provide support for the statement that soft TQM contributes positively to employee job satisfaction, which is one of the main goals of any quality management system (Dubey et al. 2018).

The other thing learned from this research is to see relationship between every aspect of soft TQM with lecturer satisfaction. The finding of the soft TQM aspect of top management commitment shows a significant relationship with lecturer satisfaction. Lecturers at ITI consider the activities of top management commitment in MBKM as an important factor to determine their satisfaction. If the organization wants to increase success, then there is no choice for leaders but to have commitment, because the reciprocal relationship between leadership commitment and employee satisfaction with TQM programs is usually very close and linear (Soltani et al., 2005). This is also supported by empirical research from Karia and Asaari (2006) and Addis et al. (2019) which show a positive relationship between top management commitment and employee job satisfaction.

With regard to lecturer empowerment, it shows a significant positive relationship with lecturer satisfaction. This shows that ITI lecturers consider managerial practices have to support them to be involved in the organization, because they need substantial autonomy and responsibility; develop new ways of learning, are briefed on MBKM, and are rewarded. The analysis also reveals that the soft TQM aspect of lecturer empowerment has a high beta coefficient compared to other aspects of soft TQM. Thus, employee empowerment is the soft TQM element that most determines lecturer satisfaction. This finding is in line with Gimenez et al. (2015) which concludes that the TQM philosophy to give autonomy to employees and let employees control the quality of their work and make improvements when needed, will contribute to increase job satisfaction. This finding is in line with previous findings which concluded that there was a significant positive impact of employee empowerment on job satisfaction (Addis et al.,2019) and (Laseinde et al.,2019).

The research findings indicate that the training variable does not have a significant relationship with lecturer job satisfaction. Lecturers experience managerial practices that encourage them to participate in training and education programs; scheduled training, wide open training opportunities are not useful to increase their satisfaction. This is in line with the findings of Batista et al. (2013), Chang et al. (2010), who stated that training has a negative effect on employee job satisfaction. However, this is not in line with Jung's findings which state that an increase in knowledge and capacity in acquiring skills indicates a higher level of job satisfaction.

The research findings indicate that the culture variable does not have a significant relationship with lecturer job satisfaction. This is not in line with the findings of Theresia et al. (2018) which states that culture has a positive effect on lecturer job satisfaction.

6. Conclusion

This study describes the relationship between aspects of soft TQM and job satisfaction in the context of changing MBKM policies in Indonesia. This study aims to close the gap of limited research on the influence of soft TQM aspects on lecturer satisfaction, especially when a new policy is implemented in Indonesia. The main conclusions that can be drawn from the results of this study can be stated as follows:

1. The research findings show that top management commitment, lecturer empowerment, training, team work, culture simultaneously have no positive effect on lecturer satisfaction. Thus, the five soft aspects of TQM simultaneously did not affect the level of lecturer satisfaction in the MBKM era.
2. The most important aspects of soft TQM to determine the satisfaction of lecturers in the MBKM era are the commitment of top management, empowerment of lecturers and team work.
3. The interesting thing in the findings of this study is that training and culture do not have a significant relationship with lecturer satisfaction in the MBKM era.
4. The findings contribute to educational organizations in Indonesia to create an understanding of the application of soft TQM aspects that result in increased teacher satisfaction in the MBKM era. However, this study has some limitations. First, the research design is cross sectional, where the questionnaires are collected at a certain time. In fact, lecturers' perceptions of the implementation of soft TQM aspects of the MBKM era can change over time. Second, this research is only a case study in a private university. Third,

the effect of moderating variables has not been studied, so it is necessary to include moderating variables that will strengthen the relationship between aspects of soft TQM and lecturer satisfaction.

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References

- Abuaraki Osman Ahmed, Abdalla Abdelrahim Idris, Examining the relationship between soft total quality management (TQM) aspects and employees' job satisfaction in ISO 9001 Sudanese oil companies, *The TQM Journal* Vol. 33 No. 1, 2021 pp. 95-124 © Emerald Publishing Limited 1754-2731, 2019.
- Addis, S., Dvivedi, A. and Beshah, B., Quality management as a tool for job satisfaction improvement in low-level technology organizations: the case of Ethiopia, *Production Planning and Control*, Vol. 30 No. 8, pp. 665-681, 2019.
- Alsughayir, A., Does practicing total quality management affect employee job satisfaction in Saudi Arabian organizations, *European Journal of Business and Management*, Vol. 6 No. 3, pp. 169-175, 2014.
- Amin, M., Aldakhil, A.M., Wu, C., Rezaei, S. and Cobanoglu, C., The structural relationship between TQM, employee satisfaction and hotel performance, *International Journal of Contemporary Hospitality Management*, 2017.
- Anschutz, E.E., TQM America: How America's Most Successful Companies Profit from Total Quality Management, McGuinn & McGuire, Bradenton, FL, 1995.
- Bari, M.W., Fanchen, M. and Baloch, M.A., TQM soft practices and job satisfaction; mediating role of relational psychological contract, *Procedia-Social and Behavioral Sciences*, Vol. 235, pp. 453-462, 2016.
- Batista, M., Feijo, A. and Silva, F., Quality management and employees' attitudes: an example from certified enterprises, *Management Research: Journal of the Iberoamerican Academy of Management*, Vol. 11 No. 3, pp. 260-279, 2013. doi: 10.1108/MRJIAM-01-2012-0468.
- Bess, James L. and Jay R. Dee., *Understanding College and University Organization, Theories for Effective Policy and Practice*, Volume I—The State of the System, p. 2, 2008.
- Bryman, A., *Social Research Methods*, Oxford University Press, Oxford, p. 540, 2001.
- Chang, C.C., Chiu, C.M. and Chen, C.A., The effect of TQM practices on employee satisfaction and loyalty in government, *Total Quality Management*, Vol. 21 No. 12, pp. 1299-1314, 2010.
- Chathurika, H.J. and Dileepa, M.E.W., Predicting employees' job satisfaction with people related TQM practices: case in apparel manufacturing industry, Sri Lanka, *Journal of Business Studies*, Vol. 3 No. 2, ISSN 2362-0269, 2016, available at: <http://dr.lib.sjp.ac.lk/bitstream/handle/123456789/5880/PREDICTING%20EMPLOYEES'%20JOB%20?sequence51>
- Dedy, A.N., Zakuan, N., Bahari, A.Z., Ariff, M.S.M., Chin, T.A. and Saman, M.Z.M., Identifying critical success factors for TQM and employee performance in Malaysian automotive industry: a literature review, *IOP Conference Series: Materials Science and Engineering*, Vol. 131 No. 1, 01, 2016, doi: 10.1088/1757-899X/131/1/012016.
- Direktorat Jenderal Pendidikan Tinggi Kementerian Pendidikan dan Kebudayaan, *Buku Panduan Merdeka Belajar - Kampus Merdeka*, 2020, edisi kesatu
- Dubey, R. An insight on soft TQM practices and their impact on cement manufacturing firm's performance: does size of the cement manufacturing firm matter?, *Business Process Management Journal*, Vol. 21 No. 1, pp. 2-24, 2015.
- Forza, C., Survey research in operations management: a process-based perspective, *International Journal of Operations and Production Management*, Vol. 22 No. 2, pp. 152-194, 2002.
- Gimenez, D., Peris-Ortiz, M. and Urbano, D., A cultural perspective on entrepreneurship and regional development: the case of the bages (catalonia), *Entrepreneurship, Regional Development and Culture*, Springer, Cham, pp. 1-21, 2015.
- Hana Krskova, An exploration of university student perceptions of discipline Introducing F.I.R.S.T. discipline principles, *Higher Education, Skills and Work-Based Learning* Vol. 10 No. 1, 2020 pp. 61-82 © Emerald Publishing Limited 2042-3896 DOI 10.1108/HESWBL-02-2019-0026
- Jian, A., Impact of TQM on employees' job satisfaction in Indian software industry, *IEEE Computer Society*, Vol. 57, pp. 378-382, 2010, doi: 10.1109/IC4E.2010.95}.

- Jun, M., Cai, S. and Shin, H., TQM practice in maquiladora: antecedents of employee satisfaction and loyalty, *Journal of Operations Management*, Vol. 24 No. 6, pp. 791-812, 2006.
- Karia, N. and Asaari, M.H.A.H., The effects of total quality management practices on employees' work-related attitudes, *The TQM Magazine*, Vol. 18 No. 1, pp. 30-43, 2006.
- Laseinde, T., Oluwafemi, I., Pretorius, J.H. and Oluwafemi, J., The role of change readiness in determining existing relationship between TQM practices and employee performance, *International Conference on Applied Human Factors and Ergonomics*, Springer, Cham, pp. 508-522, 2019.
- Mohrman, S.A., Lawler, E.E. III and Ledford, G.E. Jr., Do employee involvement and TQM programs work?, *Journal for Quality and Participation*, Vol. 19 No. 1, p. 6, 1996.
- Morrow, P.C., The measurement of TQM principles and work-related outcomes, *Journal of Organizational Behavior*, Vol. 18 No. 4, pp. 363-376, 1997.
- Ooi, K.B., Bakar, N.A., Arumugam, V., Vellapan, L. and Loke, A.K.Y., Does TQM influence employees' job satisfaction? An empirical case analysis, *International Journal of Quality and Reliability Management*, Vol. 24 No. 1, pp. 62-77, 2007.
- Soltani, E., Lai, P.C. and Gharneh, N.S. Breaking through barriers to TQM effectiveness: lack of commitment of upper-level management, *Total Quality Management and Business Excellence*, Vol. 16, Nos 8-9, pp. 1009-1021, 2005.
- Sweis, R.J., Saleh, R.A., Sharairh, Y. and Moarefi, A., An investigation of the satisfaction of project managers and team members: a comparative study between ISO 9001-certified and nonISO 9001-certified project based companies in Jordan, *International Journal of Quality and Reliability Management*, Vol. 36 No. 5, pp. 708-734, 2019.
- Thiruchelvi, A. and Palanichamy, Y., Does the soft aspects of TQM influence job satisfaction and commitment: an empirical analysis, *The TQM Journal*, Vol. 29 No. 2, pp. 385-402, 2017.
- Theresa, L. et al, The Influence of Culture, Job Satisfaction and Motivation on the Performance Lecturer / Employees, *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2018.
- Theresa, L. et.al., The Influence of Teacher Certificate, Job Satisfaction and Motivation on the Teacher's Performance, *International Journal of Economic Research*, Volume 15, Number 1, 2018, ISSN: 0972-9380 available at <http://www.serialsjournals.com>
- Theresa, L. et al, Establishment proper of the balanced scorecard indicators to support decision making in a university: a case study in Institut Teknologi Indonesia, *IOP Conf. Ser.: Mater. Sci. Eng.*, 2017. 277 012008

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