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NO WORK NO PAY: POINT SYSTEM LEARNING AS TQM INNOVATION IN HIGHER EDUCATION

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Abstract

This research attempts to explore empirically the impact of Point System Learning (PSL) on TQM and SDT, SDT on TQM, and PSL on TQM through SDT. The population was all 105 students in the 3rd semester (odd 2021/2022) of the Management Study Program of UNP Kediri who attended the MSDM II course with PSL. A total sampling technique was used. Data were collected through survey questionnaires, comprised of 25 statements. The analysis technique used Structural Equation Modeling (SEM) with the Partial Least Square (PLS) method. This research proved that PSL has a significant direct effect on SDT and TQM, and SDT has a significant direct effect on TQM. The PSL also has a significant indirect effect on TQM through SDT. The findings illustrated that with the existence of PSL, students are satisfied with the performance of lecturers, lecture materials, lecture technology, and lecture development conducted by lecturers at UNP Kediri. Thus, to create high student intrinsic motivation and college TQM, the role of lecturers in implementing PSL is very necessary.

Keywords: Point System Learning, SDT, TQM.

INTRODUCTION

College as one of higher education is required to be a catalyst for improving the quality of education and creating quality human resources. This can be achieved if learning at the higher education level always innovates to find effective learning for students. This innovation shows the usefulness of educational institutions so that they are considered to exist (Militaru et al., 2013). Moreover, Universities cannot receive government and business support forever, they have no choice but to start improving the educational knowledge creation process, including aspects of its delivery (Mehra & Rhee, 2004).

Hence, to avoid getting stuck in a cycle of endless trials of the education system, educational orientation must be focused on developing and strengthening students' hard skills and soft skills in a balanced manner. The highest assessment of students during the educational process is not only their intellectual value but also what are no less important “soft skills”. Soft skills such as openness, honesty, responsibility, hard work, never giving up, the ability to communicate, adapt, collaborate, and so on, are the basic potentials of students that must be strengthened and developed in educational and learning activities and activities in tertiary institutions as a provision for students to face challenges of the times. This means that soft skills education is an integral part of educational and teaching activities and activities in tertiary institutions.

Colleges have to improve themselves by reorienting education and teaching towards educational philosophy, in which education is not only increasing intellectual but building character as well. Competence, creativity, innovation, ability to think critically and adapt are the keys to education in higher education today to respond to the challenges. Thus, the education and teaching practices in higher education must be balanced between hard skills and soft skills. This is the actual implementation of the mandate of Article 31 paragraph (3) of the 1945 Constitution and Law no. 20 of 2003 article 3, as well as Law no. 12 of 2012. This has become a reference for colleges to

further improve the quality of their education teaching practices so that students' hard skills and soft skills as human resources can be achieved. As much success in developed countries is driven by the availability of quality human resources rather than the availability of abundant natural resources. On this basis, the development and improvement of the quality of human resources is a priority and a challenge that must be faced in the globalization era.

One of the efforts of higher education institutions to improve the quality of human resources (HR) is to innovate the Total Quality Management (TQM) system, which is an approach in running a business to maximize institutional competitiveness through continuous improvement of products, services, people, processes, and environment. Higher education TQM is a philosophy of continuous improvement that can provide a set of practical tools to every educational institution in meeting the needs, desires, and expectations of its current and future customers (Sallis, 2010:73). The positive relationship between TQM and innovation performance focuses on customer orientation, management leadership, and continuous improvement which are critical for innovation success (Mielgo et al., 2009).

Based on this view, the form of implementation in the basic principles of TQM is that customers' interests must be prioritized with high commitment. Continuous quality improvement in higher education management is necessary to provide satisfaction to customers/students. Accordingly, colleges have to provide provisions on how students can think creatively, innovatively, and critically. So, if colleges want to have high competitiveness on a global scale, they must be able to do better work, be more effective, and be more efficient in producing quality graduates. The TQM guidelines for higher education in Indonesia can refer to the seven quality management principles stipulated in ISO 9001:2015 regarding customer satisfaction, which consist of customer focus, leadership, engagement of people, process approach, improvement, and evidence-based relationship management. It is simplified in this study into satisfaction with lecturer performance, satisfaction with course material, and satisfaction with learning technology.

The application of TQM cannot succeed instantly, the expected innovative changes cannot be realized immediately. Continuous efforts are needed in order to produce quality human resources. One learning approach to realize the success of higher education TQM innovation is Point System Learning (PSL). PSL in this study acts as a student-centered approach to learning where students are more active than lecturers in class. This approach aims as same as other learning approaches, which is to improve student learning performance, motivation, involvement, higher-order thinking skills, and student learning experiences. Commonly, a point system is used to discipline student behavior based on the offense committed. However, PSL in colleges is used as a lecturer's assessment instrument to determine students' final grades for certain courses. Rasyid and Mansur explained that assessment is the process of collecting information or data used to make decisions about learning (Ambara et al., 2014:54).

The assessment process includes collecting evidence of student achievement. In addition, the point system can also be considered as a form of evaluative assessment and lecturer appreciation so that students are encouraged to be more active and involved in every learning activity. Brown simply stated that evaluation is an action or process to determine the value of something (Sudijono, 2011:1). The PSL dimension

refers to the 1945 Constitution, Law no. 20 of 2003 article 3, Law no. 12 of 2012, as well as the theory of PAKEM (Active, Creative, Effective, and Fun Learning) which contains the meaning of student freedom, student activity, student freedom, student creativity, student independence, pleasing students, harmony, and development. This context leads to the current study's perspective that when PSL is pleasing to students, TQM which is based on student satisfaction will easily be realized.

In fact, the PSL is carried out by giving some points to students who have carried out their learning activities which are then converted into the final grade of the course. The purpose of PSL is to stimulate the emergence of student self-motivation in obtaining the expected final grade. This requires the freedom of students to do or not to do an action. Thus, the process of cultivating motivation within the individual is closely related to Self Determination Theory (SDT). SDT is interpreted as a theory that emphasizes the importance of individual freedom in acting according to his choice, and also the existence of intrinsic motivation within the individual so that when individuals are extrinsically motivated and expect external rewards, the results obtained will be negative (Vandenbos, 2008). This definition places the PSL method as a student's external motivation because it is an encouragement that comes from outside the student's self.

Meanwhile, students' internal motivation comes from the students' own will which is a reflection of their needs. The main focus of SDT is on volitional or self-determination behavior with social and cultural conditions that encourage it, controlling a series of basic and universal psychological needs, namely independence, competence, and relatedness (Ryan & Decy, 2009). Basic needs satisfaction leads students to pay more attention (behavioral engagement), feel interested (emotional engagement), use in-depth learning strategies (cognitive engagement), and express their thoughts (agentic engagement) during academic activities (Reeve et al., 2019). The SDT dimension refers to three psychological needs that explain an individual's intrinsic motivation to adopt an innovation: the need for relatedness, the need for autonomy, and the need for competence (Deci & Ryan, 2012). SDT is also closely related to changes in a person's behavior, such as changes in the behavior of students' attention to dispose of trash in its place, which is determined by their intrinsic motivation (Cho, 2019). This context leads to the current study's perspective that the application of a good PSL can stimulate student self-determination.

The PSL adheres to the principle of "No Work, No Pay". The term "No Work, No Pay" appears in the management of Human Resources (HR), especially in HR Management in private institutions. Efficient actions in HR management include providing fair and professional compensation or remuneration. Fair means according to performance, the better the performance, the better the compensation provided by the agency. Likewise, "No Work, No Pay" in the PSL, students will not be given points if they do not carry out the specified learning activities. These activities include active discussions which contain presentations, asking questions, answering, and providing other responses to lecture material, lecturer performance and the context that occurs in lectures. In addition, the principle of "No Work, No Pay" also contains the concept of reward and punishment, because the point system contains an assessment that refers to student work. Each student who performs 1 learning activity will be given 1 point of reward, otherwise, points will not be given (as a form of punishment) if they do not carry out the certain activity. Indirectly, students are encouraged to think critically, creatively, collaboratively, and communicatively (K4) (Sugiono, 2022).

Based on the researchers' experience and observations in the University of Nusantara PGRI Kediri (UNP Kediri) - Indonesia, students have low learning motivation, and the tendency to broaden their horizons and develop their own potential through formal learning activities seems to decrease. It can be seen from the attitude of students who tend to be passive and more silent than discussing with friends or lecturers. This condition was more clearly felt during the Covid-19 pandemic from 2019 to 2021. In addition, the standard form of assessment set by the campus only focuses on attendance, assignments, and exam results, not yet in the form of specific values of student attitudes in the learning process (for example activeness students in discussing, asking, answering, responding to arguments, etc.), because this assessment is entirely the individual right of the lecturer. Thus, this general form of assessment tends not to encourage students to think critically, creatively, and innovatively. If this condition of students is allowed to continue, it is feared that the output quality of human resources will get lower which will then have an impact on the quality of tertiary institutions in the future. Recognizing the importance of achieving educational goals in Indonesia and the success of TQM innovations in higher education, college actor (especially lecturers) need to motivate their students to always play an active role in improving the learning process according to educational goals (creative, innovative, and critical thinking).

Unfortunately, specific empirical studies that examine the relationship between PSL, TQM, and SDT are still limited. Even so, there are several previous studies that link cooperative learning methods with TQM (Mehra & Rhee, 2004), Massive Open Online Courses (MOOCs) with SDT (Gupta, 2019), flipped classrooms with student motivation (Zainuddin et al., 2019), and blended learning with the satisfaction of students' psychological needs (Siddiqui et al., 2020). Based on the empirical results of these studies, this study tries to empirically explore the impact of the PSL on TQM (H_1), the PSL on SDT (H_2), SDT on TQM (H_3), and the PSL on TQM through SDT (H_4). Expectedly with the results obtained, the PSL method can provide a new perspective on the world of education and can increase student motivation so that higher education TQM goals can be achieved.

METHOD

This study is quantitative research using a survey approach to obtain data on beliefs, opinions, behavioral characteristics, and variable relationships and to test several hypotheses. The population of this study was all 105 students in the third semester of the UNP Kediri Management Study Program (odd year 2021/2022) who attended MSDM II courses with PSL. A total sampling technique was used. Data collection used a questionnaire containing 25 statements by giving scores to the answers (A=5, B=4, C=3, D=2, and E=1). The analysis technique uses Structural Equation Modeling (SEM) with the Partial Least Square (PLS) method.

FINDINGS AND DISCUSSION

Outer Model

Evaluation of the measurement model (outer model) through loading factor is carried out to determine the validity of the indicators in forming a latent variable, by looking at the convergent validity values of the indicators contained in the model. Each indicator in the model must meet convergent validity, that is, have an absolute loading factor >

0.7. If there are indicators that do not meet the convergent validity criteria, these indicators are removed from the model. As a result of the first round test, Table 1 shows the indicators which have an outer loading smaller than 0.700 was x1, y9, y12, y13, and y15 (red color), these indicators have to be eliminated from the model. Visually, Figure 1 displays the model of the convergent validity result of SEM-PLS in the first round test.

Table 1: Convergent Validity Result (1st Round)

	SDT	PSL	TQM
x1		0.627	
x2		0.800	
x3		0.869	
x4		0.857	
x5		0.799	
x6		0.739	
y1			0.741
y10			0.803
y11			0.725
y12			0.622
y13			0.657
y14			0.843
y15			0.694
y2			0.760
y3			0.841
y4			0.822
y5			0.771
y6			0.726
y7			0.732
y8			0.760
y9			0.658
z1	0.749		
z2	0.815		
z3	0.772		
z4	0.806		

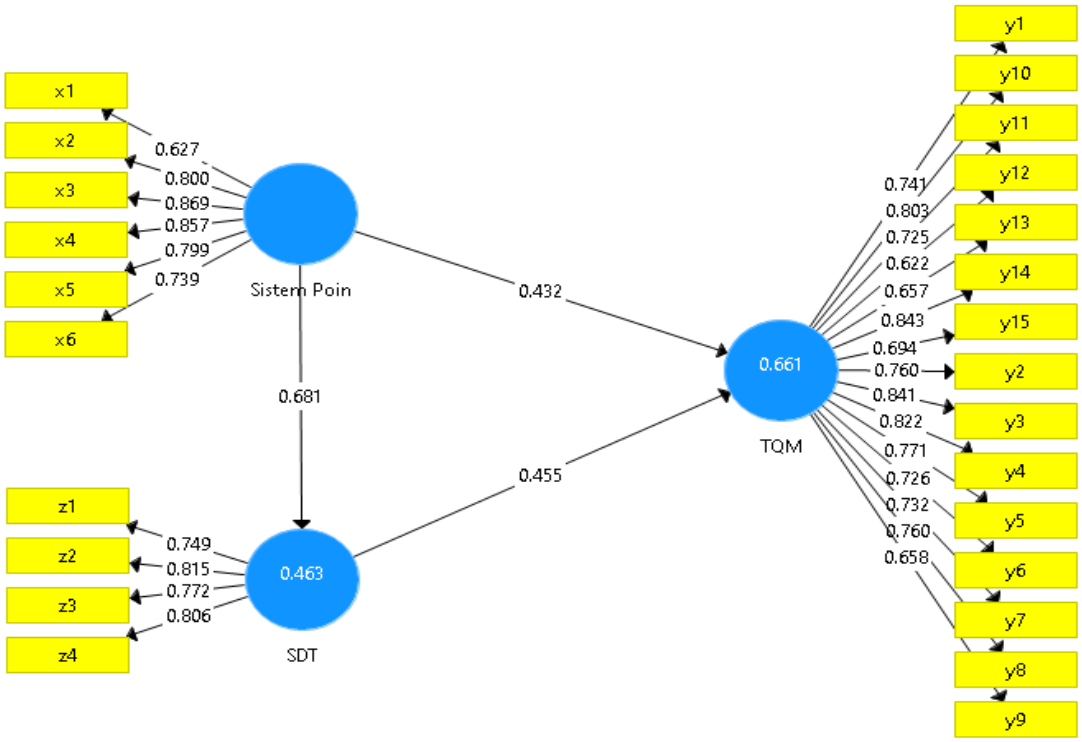

Figure 1: Convergent Validity Model Results of SEM-PLS (1st Round)

Then, Table 2 shows all remaining indicators have an outer loading greater than 0.700, there are no indicators that need to be eliminated from the model. Visually, Figure 2 displays the model of the convergent validity result of SEM-PLS in the second round test.

Table 2: Convergent Validity Result (2nd Round)

	SDT	PSL	TQM
x2		0.767	
x3		0.871	
x4		0.867	
x5		0.825	
x6		0.762	
y1			0.741
y10			0.813
y11			0.731
y14			0.838
y2			0.757
y3			0.827
y4			0.835
y5			0.788
y6			0.762
y7			0.743
y8			0.773
z1	0.749		
z2	0.814		
z3	0.775		
z4	0.805		

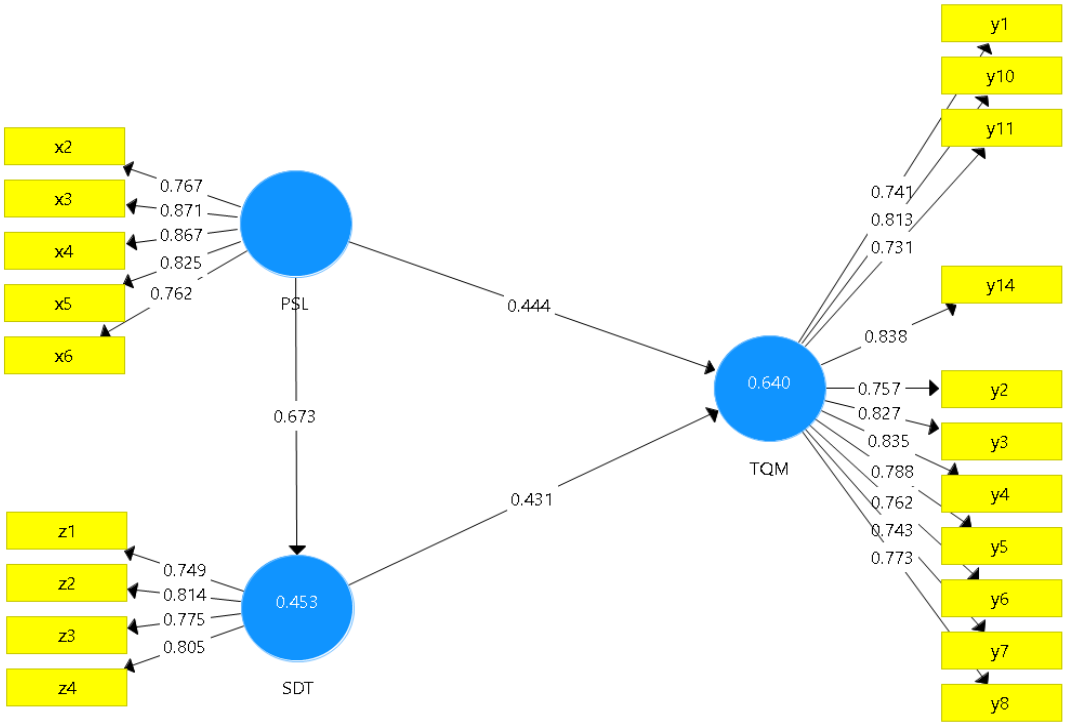

Figure 2: Convergent Validity Model Result of SEM-PLS (2nd round)

Evaluation of the measurement model (outer model) can also be seen based on average variance extracted (AVE) and composite reliability. Table 3 shows the results of the average variance extracted (AVE) and composite reliability values. The recommended AVE value is a value greater than 0.5, the AVE results from this study are known to be above 0.5, which means that the variance that can be explained by dimensions is above 50%. Composite reliability aims to test the reliability or consistency of latent or construct variables, where a composite reliability value above 0.7 means that the latent variable has good reliability. All latent variables from this study have a composite reliability value above 0.7.

Table 3: Results of Average Variance Extracted (AVE)

	Composite Reliability	Average Variance Extracted (AVE)
SDT	0.866	0.618
PSL	0.911	0.672
TQM	0.946	0.614

Inner Model

The inner model begins by looking at the coefficient of determination (R^2) which is used to see how much variation the endogenous variables are capable of explaining by exogenous variables in the inner model. Table 4 shows that the latent variable SDT has a coefficient of determination of 0.453, which means that the variation from SDT is able to be explained by PSL of 45.3%, while the remaining 54.7% is explained by other factors outside the model. The TQM latent variable has a coefficient of determination of 0.640, which means that the variation of TQM is ably explained by PSL and SDT by 64%, while the remaining 36% is explained by other factors outside the model.

Table 4: The Value of the Coefficient of Determination (R^2) in the Inner Model

	R Square	R Square Adjusted
SDT	0.453	0.448
TQM	0.640	0.633

Direct Effects

Table 5 shows the estimation results of the path coefficients from the PLS model of PSL, SDT, and TQM. PSL latent variables have a positive and significant influence on the SDT latent variables with an estimated path coefficient of 0.673 and a p-value of 0.000. SPL latent variables have a positive and significant influence on the TQM latent variables with an estimated path coefficient of 0.444 and a p-value of 0.001. SDT latent variables have a positive and significant influence on the TQM latent variables with an estimated path coefficient of 0.431 and a p-value of 0.002.

Table 5: PLS Model Estimation Results of SDT and TQM

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
PSL → TQM	0.673	0.069	9.725	0.000
PSL → SDT	0.444	0.128	9.265	0.001
SDT → TQM	0.431	0.142	3.046	0.002

The results causality can also be displayed in the following model:

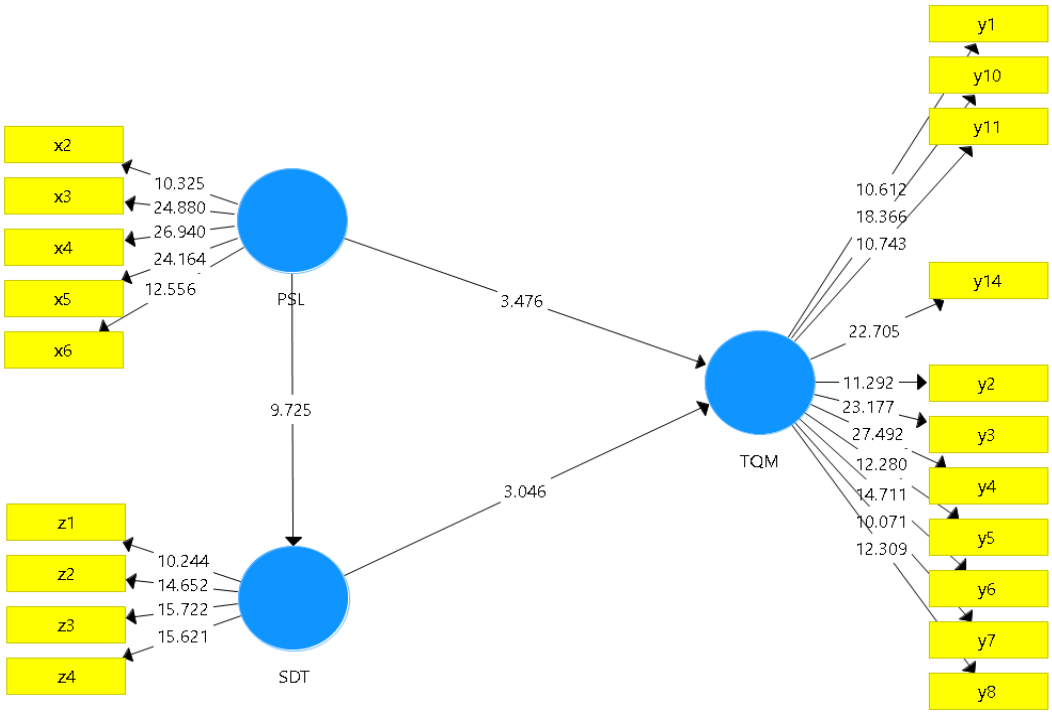

Figure 3: SEM-PLS Modeling Results of SDT and TQM

Model estimation results of this study are as follows:

SDT = 0.673 PSL

TQM = 0.444 PSL + 0.431 SDT

Figure 3 shows that the answers to the hypothesis have a direct effect between PSL, SDT, and TQM.

Indirect Effects

Table 6 shows the indirect effect of PSL on TQM through SDT. The path coefficient of the indirect effect of PSL on TQM through SDT is 0.290 with a p-value of 0.002 (significant at the 5% level).

Table 6: Indirect Effect

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
PSL → SDT				
PSL → TQM	0.290	0.094	3.074	0.002
SDT → TQM				

H_1: PSL has a significant effect on SDT

Table 5 proved the first hypothesis was accepted. It means that the better the PSL, the greater the SDT. If PSL is applied and improved consistently by lecturers, student self-determination will be greater as well. This result was related to evaluation of learning with a point system given to students is deemed sufficient for their respective needs, which are the need for relatedness, autonomy, and competence (Deci & Ryan, 2012).

This result is related to similar to previous studiy which explained that the point system order is very effective in improving the quality of student education (Gani, 2018). The point system that is implemented with reward and punishment motivates students to be able to progress and be better so that they can be orderly and disciplined in complying with existing regulations in the school, also students have more good morals. Likewise, the concept of PSL by providing freedom, activeness, independence, creativity, independence, fun, harmony, and development able to give an impact on students' intrinsic motivation. More broadly, it also supports the improvement of hard skills, soft skills, and student character at UNP Kediri.

PSL comes from the initiative of lecturers in college, so practice in an educational environment requires the support of teacher autonomy to encourage autonomous or volitional behavior among students (Awang-Hasyim et al., 2017). It is also said in other findings, that teacher plays an important role in supporting the satisfaction of students' psychological needs, class involvement, and positive academic results (Dincer et al., 2019). Generally, autonomy-supportive teachers encourage students to pursue self-determined agendas and then support students' initiatives and intrinsic motivation (Jang et al., 2016).

The result was reinforced by the majority of respondents' answers which stated that with the PSL, learning was fun because they competed to be more actively involved in learning. In addition, they also feel freer and more independent and are motivated to be creative in finding learning materials. Thus, the PSL as a learning evaluation tool in college needs to be implemented properly, because it is proven to be able to foster students' intrinsic motivation to play a greater role in the learning process.

H_2: PSL has a significant effect on TQM

Table 5 proved the second hypothesis was accepted. It means that the better the SPL, the better the TQM. If the PSL is applied and improved consistently by lecturers, student satisfaction which is the goal of higher education TQM will improve as well. The concept of PSL by providing freedom, activeness, independence, creativity,

independence, fun, harmony, and development able to support students' satisfaction improvement with lecturer performance, course material, and lecture technology at UNP Kediri. This is as stated in ISO 9001:2015 regarding the seven key elements of TQM success.

Meanwhile, most of the respondents' answers stated that students felt in accordance with the lecturer's way of facilitating their learning, the relevance of lecture material that facilitated their understanding, and was supported by appropriate lecturing technology. Thus, the practice of PSL can be a determining factor for realizing good TQM in higher education because it can satisfy students' learning needs.

Actually, this result illustrates that PSL is able to become a practical tool for higher education to make continuous improvements in meeting the needs, wants, and expectations of its current and future customers (Sallis, 2010:73). The continuous quality improvement in higher education in question is that PSL needs to be developed constantly according to the needs, desires, and expectations of UNP Kediri students so that they can be satisfied. In the end, unconsciously, students' hard skills, soft skills, and character will have good qualities.

Evidence from the findings of this study also illustrates that PSL in the learning process can be considered as a learning strategy that plays an important role in student learning outcomes. Learning strategies require lecturers to use teaching approaches that are appropriate to the context and subject of study to achieve surface or deep learning (Prosser & Trigwell, 1999). Applicable to the results of this study, another study described that adjustments to learning activities make a significant contribution to learning outcomes (Tetteh, 2015). This means that learning adjustments with PSL for students can make a good contribution to TQM innovation at UNP Kediri.

H_3: SDT has a significant effect on TQM

Table 5 proved the third hypothesis was accepted. This result means that the greater the SDT, the better the TQM. This shows that if SDT or students' intrinsic motivation in learning continues to be improved, then student satisfaction which is the goal of higher education TQM will improve as well. It proves that the SDT concept which includes individual intrinsic motivation (needs for relatedness, autonomy, and competence) is able to support increased student satisfaction with lecturer performance, course material, and lecture technology at UNP Kediri. Thus, by growing motivation among students, TQM in higher education will be easily realized.

This result was reinforced by the majority of respondents' answers which stated that students felt compelled to meet their needs in the learning process and felt involved in it. Finally, they were satisfied with the appropriate learning facilities, course materials, and lecture technology. Therefore, self-determination within students can be a determining factor for realizing good TQM in higher education because it can satisfy students' learning needs. Also explained in previous studies' findings, TQM's success in the learning process can be realized by paying attention to students' learning motives because learning motives significantly influence learning outcomes (Tetteh, 2015).

H_4: PSL has a significant effect on TQM Through SDT

Table 6 proved the fourth hypothesis is accepted. The positive indirect path coefficient indicates that the larger the PSL, the better TQM will also be mediated by SDT. It means that the presence of SDT is able to become an intermediary between PSL and

achieving the TQM goals of UNP Kediri college. Furthermore, these results indicate that if PSL is implemented according to PAKEM principles and according to the purposes of the law (freedom, activeness, independence, creativity, independence, fun, harmony, and development), it will form intrinsic motivation (SDT) of students in the form of the need for relatedness, autonomy, and competence, to be more involved in the learning process. At last, SDT will have an impact on college TQM. The creation of good TQM reflects customers (students) who are satisfied with all the services received, regarding the performance of lecturers, lecture materials, and lecture technology.

Based on the results discussion of this study, the term “no work no pay” in learning with PSL seems appropriate to use. Students must “work” first to get the appropriate “pay”. Students are encouraged to find ways to directly involve themselves in learning activities in order to get maximum grades. In the end, they will be more active, more creative, more independent, feel freer, feel happier, more independent, more harmonious, and more developed. Indirectly, students will feel satisfied with their achievements while carrying out learning activities.

Therefore, the role of the lecturer is needed in carrying out innovations to develop student character through the learning process, because the teaching styles of each lecturer are different. This is a challenge for lecturers to continuously adjust their teaching style (Vansteenkiste et al., 2019). More specifically, the more that teachers’ actions and classroom dynamics can support learners’ need for autonomy, competence, and relatedness, the more that learners actively involve themselves in their learning activities, allowing them to learn more and show higher academic achievement (Dincer et al., 2012; Noels et al., 2016; Reeve, 2012; Ryan & Deci, 2000).

Further, the lecturer’s initiative by creating the SPL model was a form of lecturer involvement in learning. The involvement of lecturers is needed to increase their interaction with students and make lecturers more sensitive in meeting student needs, which ultimately causes students to get a satisfying educational experience (Bilal et al., 2021).

CONCLUSION

This study proved that PSL has a significant direct effect on SDT and TQM. PSL also has a significant indirect effect on TQM through SDT. Thus, in order to create high student intrinsic motivation and good college TQM, the role of lecturers in implementing PSL is very necessary. The findings also illustrate that with the existence of PSL, students are satisfied with the performance of lecturers, lecture materials, lecture technology, and lecture development conducted by lecturers at UNP Kediri.

The lack of specific empirical studies on PSL is the limitation of the current study. Thus, further studies are required to explore more deeply by involving a larger number of respondents so that the PSL concept as one of the TQM innovations obtains a broader and more comprehensive picture.

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