



Mapping the Quality Excellence Position of Competitiveness of the Teacher Professional Education Program (PPG) in Five Universities in the Soloraya Region

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Abstract

This study aims to determine the position of excellence of each teacher professional education program in the Soloraya region so that it can determine the right marketing strategy to satisfy and increase public interest in trusting the quality of PPG education services presented by several public and private universities that organize PPG programs. This research was conducted with a quantitative approach through multivariate multidimensional scaling statistical tests. The novelty of this research combines the concept of competitive advantage of the quality performance of PPG education service institutions in the Soloraya region through position mapping using multidimensional scaling. The population in the study were all people who had understood the quality of PPG program services in five universities. Sampling respondents using purposive sampling technique as many as 115 adult respondents. The attributes in the questionnaire were adapted from Hasanah et al including the dimensions of the quality of service of educational institutions tangibles, reliabilities responsiveness assurance and empathy. The final stage of the research has formed a map of the position of each PPG program in five universities. This activity is the beginning of efforts to create the competitiveness of each PPG program in the Soloraya region to welcome the era of achieving SDGS' goals. All of which leads to the achievement of optimal economic growth of teacher human resources in 2045.

Keywords: mapping position, quality excellence, PPG, five universities





1. INTRODUCTION

The existence of human resources in an institution plays a very important role. Teacher processionality has great potential to carry out the superior activities of primary and secondary education institutions. The potential of every human resource in an institution must be utilized as well as possible so that it can provide optimal output. Teacher achievement and performance is not something that appears by chance, but many influencing factors including the fairness of compensation, appreciation of the work environment and the leadership style of the principal (Sofanudin, 2016). Performance achievement will be achieved if it is preceded by a positive action, namely carrying out the assigned tasks optimally. Teachers will be more motivated to carry out activities according to the responsibilities of their work if the principal and stakeholders understand and pay close attention to their needs. Teachers, educators and employees are basically those who work for money, in this case the award can be in the form of salaries, allowances and various other performance bonuses (Suroso, 2021).

The existence of human resources in an institution plays a very important role. Labor has enormous potential to carry out institutional activities. The potential of each human resource in the institution must be utilized as well as possible so that it can provide optimal *output* (Winarsih, 2017). Through the processes of various activities, the human resources of an institution are expected to maximize the responsibility for their work because educators and employees have been equipped with PPG education and training which is certainly related to the implementation of their work. Providing salaries, good work facilities and providing benefits are basically the rights of educators, employees and are the obligations of educational institutions to support the contribution of teachers, educators and employees in order to achieve predetermined goals (Zulkifli et al, 2017).

The rapid advancement of science and technology at this time makes several educational institutions have to be selective in managing quality human resources in order to compete with other institutions. No matter how perfect the technological and economic aspects in the educational environment without attention to the aspects of quality human resources for educators, it is difficult for institutional goals to be achieved (Prihono and Wahyunanto, 2020). Therefore, to get the quality human resources expected and desired in an educational institution is not easy. It takes a broad strategy and insight in studying and developing various ways so that the human resources of educators can be effectively integrated into superior educational organizations (Prihono, 2018).





Teacher performance is a manifestation of work done by educators which is usually used as a basis for evaluating educators or individuals. Good performance is a step towards achieving individual goals. Therefore, performance is a determining target in achieving this goal. Performance is a manifestation of work carried out by human resources which is usually used as the basis for assessing work culture or organizations, so it is necessary to strive to always improve the performance of educators. There are factors that affect educator performance including: compensation, quality of educator performance, and educator work motivation (Alzafari et al, 2019).

Performance is an interdisciplinary approach to determining effective goals. This activity can be in the form of making plans, applications, methods of using productive ways to use resources effectively and efficiently while maintaining high quality. Performance needs to include the necessary resources such as human resources and skills and skills, goods, capital, technology, information management, energy and various other resources (Elbadiansyah, 2021).

Chakraborty and Majumdar (2011) explained that in the era of increasingly fierce competition, improving service quality and its measurement is one of the important issues to develop institutional efficiency and growth. The identity of an educational institution that is built can be in the form of a service dimension that is favored as a characteristic service from a teacher training service provider that is different from the conventional education institution model. Related to the development of the identity of teacher training institutions and PPG programs, it is necessary to create a perceptual mapping to position public perceptions of the service dimensions of one PPG service institution compared to competing PPG program services.

The competitive advantage of an educational institution can be formed in various ways. Kotler and Fox (1995) state that in competition an educational institution can use marketing assets to form a competitive advantage. These marketing assets include aspects of the quality of PPG education service programs, differentiation of PPG education service programs, fees or prices, reputation of PPG education service institutions and human resources of lecturers, education personnel and administrative staff of PPG education service institutions that are well qualified. The position of competitive advantage can be done through the presentation of a spatial map of public perceptions and preferences using impressions that can be seen (Supandi et al 2009). Perception or the relationship between stimuli is psychologically shown as a geographical relationship between points in a space through a multidimensional scale (spatial map). A spatial map is a relationship between





brands or other stimuli perceived by the public, expressed as a geometric relationship between points in a multidimensional space. The geometric relationship has coordinates that show the peculiarity of the location of a brand of educational services of PPG higher education institutions compared to the service brands of other PPG higher education programs.

Configuration in spatial maps can be interpreted through the study of coordinates and relative positions of objects. Objects that are close together will compete because they have similarities related to the quality of service activities provided (Bijmolt, Wedel and deSarbo, 2020). An isolated brand indicates the existence of a unique image. Gaps in the spatial map can indicate potential opportunities to introduce new products and services.

Quality measurement activities of the leading PPG education program to determine the position of competitive advantage need to be carried out in five universities implementing PPG programs in the Soloraya region. The research team needs to conduct research measurements of the quality of PPG program services based on Multidimensional scaling and the quality of human resource performance independently. The assessment results need to be disseminated to all parties so that the community can find superior PPG program services. The main research problem formulation: "*Is service quality excellence able to form a map of competitive advantage positions in five higher education service institutions providing PPG programs based on multidimensional scaling?*"

2. RESEARCH METHOD

2.1. Research Design

This research is a quantitative study using the multivariate *multidimensional scaling* analysis method (Hair *et al*, 2019).

2.2 Location and Time of Research

The research was conducted in the Soloraya region at five public and private higher education institutions that open PPG Program services, namely UNS UMS Unisri Unwidha and Univet Sukoharjo. These five higher education institutions are characterized by the presentation of superior PPG education services. The selection of universities as samples is based on data from Lldikti Region 6, Klaten Regency Education Office and websites and social media related to the PPG program in five universities. Research activities were carried out for 4 months in the field and





one month of activities including tabulation, analysis of the final report and presentation of outputs.

2.3 Scope of Research

The scope of the research includes a survey of adults who have sufficient understanding to be able to distinguish each of the five service quality advantages of higher education institutions providing PPG program services by providing questionnaires online (*google-form*). This research activity at the final stage is known to the competitive position of each of the five universities that provide PPG programs through the four dimensions of the competitive advantage model. five dimensions of service quality of PPG institutions include the dimensions of *tangibles, reliabilities, assurance, responsiveness and empathy* (Hasanah et.al, 2022).

The questionnaire was distributed to 115 respondents to find out how they perceived the attractiveness of the performance of the quality of education services of the five universities implementing the PPG program. Hair *et al*, (2019) explain the adequacy of the number of samples according to the multivariate test so that normal data requires at least 10 times the number of indicators. The data obtained were then analyzed using the *multidimensional scaling* multiple variable technique to determine the relative position of one object relative to four other objects based on respondents' assessments of the five dimensions of service quality.

2.4 Determination of Data Sources

The research data source is primary data obtained through distributing questionnaires. Secondary data is obtained from research activities through literature studies through searching various research journals from the internet, magazines, text books and other articles that are in line with the research topic.

2.5 Data Analysis

Data checking, data tabulation, validity and reliability testing of model instruments were carried out at an early stage. The results of the initial data validity and reliability test found the data to be valid and reliable. Further analysis was carried out through the multivariate multiple variable *multidimensional scaling* (MDS) test using the SPSS 21 program (Hair *et al*, 2019).





3. RESULTS AND DISCUSSION

31 Data analysis

The framework of the research model based on multidimensional scaling variables through interaction tests is outlined in Figure 1 below:

Stimulus Coordinates

Stimulus Coordinates

Dimension

Stimulus Stimulus 1 2

Number Name

1	PPG_UN	1.9357	,2615
2	PPG_UM	,2681	,1398
3	PPG_Unis	-.6041	,8709
4	PPG_Univ	-,2809	-1,7183
5	PPG_Unwi	-1,3188	,4461

Abbreviated Extended

Name Name

PPG_Unis	PPG_Unisri
PPG_Univ	PPG_Univet
PPG_Unwi	PPG_Unwidha



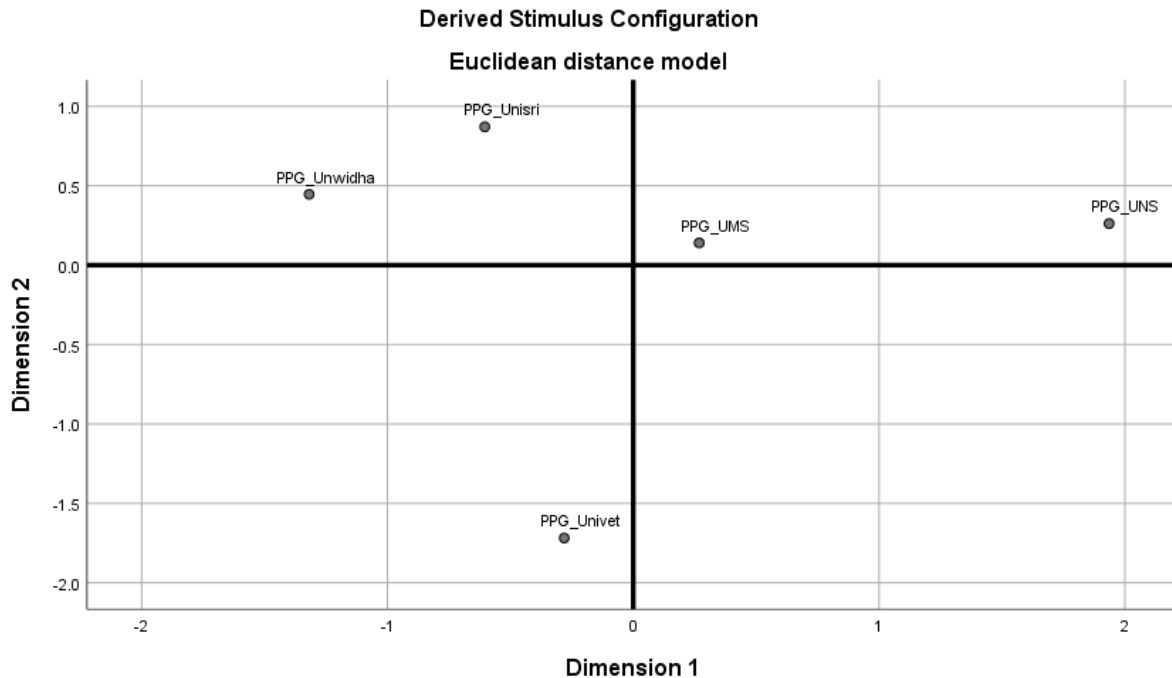


Figure 1. multidimensional map of competitiveness of five PPG-hosted universities

Based on the spatial map, it can be seen that the position of PPG UNS and UMS is in quadrant I. Quadrant I shows the position of excellence in the quality of superior education services for the PPG Program, both qualitative and quantitative aspects of the five dimensions of tangibles, reliabilities, assurance, empathy and responsiveness. These two large universities have similarities related to the superior quality of PPG education services so that the community response in the Soloraya region places these two large universities in quadrant I or the superior quadrant. Quadrant III is occupied by PPG Univet Sukoharjo. The location of Univet Sukoharjo is in a separate area in southern Solo with a tendency towards Wonogiri Regency so that people have a special perception regarding the geographical aspects of the existence of Univet Sukoharjo. Quadrant IV position is occupied by PPG Unisri and PPG Unwidha. Unisri and Unwidha have the distinctiveness of being in a specific geographical cluster of the northern Solo cluster economic growth area and Unwidha in the Klates Regency area as the center of Solo-Jogyakarta economic growth. Quadrant IV for respondents has a category as a community economic cluster university that is experiencing rapid growth. Universities in quadrant IV positions can be categorized



as challengers in presenting the quality of superior PPG education services with two other large universities, namely UNS and UMS.

4. DISCUSSION

Service Quality is one of the unique strategies for universities to survive in competitive conditions. Consistently creating PPG education service quality that is better than competitors will result in a competitive advantage. Service quality should be the focus of higher education service delivery in the future. Poor service quality will result in the collapse of competitive advantage. The collapse of competitive advantage will cause new student interest to decline, dissatisfaction of service users, moving to other universities which leads to the stagnation of the operations of the college concerned. (Widikusyanto and Purbohastuti, 2020)

Service Quality is the basis for designing marketing strategies effectively. Service Quality optimally will provide an important competitive advantage for universities by generating repeat sales, positive user responses and the emergence of word of mouth student loyalty and differentiation of competitive service products (Abdullah 2005). Service Quality is an effective means to create service offerings that are different and superior to competitors so that universities organizing PPG programs have an optimal competitive advantage that is useful as a strategy to survive and attack competitors. Competitive advantages that are different from competitors have an impact on increasing satisfaction, increasing customer trust and value, improving the image of higher education, placing institutions on the multidimensional scaling position map in the superior quadrant and increasing student loyalty. Thus, building superior Service Quality can be a means of winning competition in the market through the creation of superior institutional competitive advantages (Widikusyanto and Purbohastuti, 2020).

The findings in this study only use five universities in the Soloraya region so that they cannot accurately describe the position of competition based on the quality of service of universities organizing PPG programs in the Soloraya region as a whole. Future research can add both the number of colleges and the number of respondents from each college that organizes PPG programs operating in the Soloraya region. Other variable-based measurements with references published by BAN PT can be added so that this research in the future is more objective. Every year there is an increase in the number of new students entering and graduating from the PPG program because the learning period of the PPG program is very short. Students' preferences will always change. Therefore, the position of





each university on the multidimensional scaling map will also change, so the preparation of the Service Quality index and positioning map can be done every year or two years periodically.

5. CONCLUSION

Based on the excellence of the performance of the quality of education services of the PPG program in qualitative and quantitative aspects, five universities obtained a value to determine each of the advantages of the quality of PPG education services. Each PPG organizing college has the highest and lowest distribution of position values related to the dimensions of service quality aspects. PPG UNS and PPG UMS have the highest PPG service quality performance position. Meanwhile, PPG Unisri and PPG Unwidha have a growing and challenger category position from the service aspects of PPG education service quality performance from both physical and non-physical aspects. There are weak points in each of the universities implementing the PPG program in the minds of respondents' perceptions which can be used as input as a follow-up to improve the quality position of the competitiveness of superior PPG education services. Each university must be able to close weak points to improve the competitiveness of the quality of PPG education services. Strengthening the quality capacity of PPG education services from physical and non-physical aspects qualitatively and quantitatively must continue to be carried out to increase the degree of quality of PPG education services of five universities in the Soloraya region. It is necessary to observe and implement constructive suggestions, there are still complaints that arise from community responses to the quality of PPG education services in five universities. It is necessary to conduct in-depth and continuous surveys as a result of changing tastes and preferences of the community related to the expectations, desires and needs of the attractiveness of the quality of educational services presented by the PPG program. Everything boils down to facing the increasingly severe challenges with the development of advanced technology in the field of education in the era of the industrial revolution 5.0 in the future.

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