

## Identify the Role of Students to Implement Sustainable Development Goals (SDGs) 4.4

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### Abstract

*This research originated from the UN (United Nations) conference which discussed and established the 2030 Sustainable Development Goals (SDGs). Indonesia is known to also support the 2030 Sustainable Development Goals (SDGs) program by (SDGs) 2030 with the National Long-Term Development Plan and National Medium Term Development Plan. SDGs have become a measuring tool in determining Impact Ranking. Academics are stakeholders who play a role in helping the achievement of SDGs, especially SDGs 4.4 in this study. This study aims to identify the role of students in the Telkom University campus within the Faculty of Business Communication. This study used a quantitative methodological approach, where the data obtained were analyzed using quantitative descriptive analysis methods through the continuum line, chi-square test and t-test differences. The results of this study provide information that there are 129 (68.61) FKB students who do not yet know what the Sustainable Development Goals (SDGs) are, then the results show that SDGs 4 and SDGs 8 get the first priority. and secondly in student perception. Based on the results of the chi-square test, it was found that 7 of the 42 indicators of this study were statistically stated to have a relationship with the type of student faculty. Next, based on the results of the different t-test, it was found that there were 11 out of 42 research indicators that were different or not the same among the types of student faculties.*

### Keywords

Sustainable Development Goals (SDGs) 2030; role of student; Telkom University



## I. Introduction

On 25 September 2015 at the Headquarters of the United Nations (UN), world leaders officially endorsed the Sustainable Development Goals Agenda as a global development agreement. Leaving No One Left is the main principle of the SDGs. With this principle, at least the SDGs must be able to answer two things, namely, Procedural Justice, namely how all parties, especially those who have been left behind, can be involved in the entire development process and Substantial Justice, namely how development policies and programs can or are able to answer the problems of citizens, especially disadvantaged groups.

With the theme "Changing Our World: The 2030 Agenda for Sustainable Development", the SDGs which contain 17 Goals, and 169 Targets are a global action plan for the next 15 years (valid from 2016 to 2030), to end poverty, reduce inequality and protect the environment. SDGs apply to all countries (universal), so that all countries without exception developed countries have a moral obligation to achieve the SDGs Goals and Targets.

Indonesia's national development agenda has been aligned with 17 goals and 94 of 169 SDGs targets. Furthermore, the agenda has also been integrated into policies, strategies and development programs for the National Medium Term Development Plan (RPJMN) and has been translated into the Government Work Plan (RKP). The integration of SDGs into development plans is also carried out at the regional level as reflected in the Medium-Term Regional Development Plans (RPJMD) and Regional Work Plans (RKPD) (Voluntary National Review of the National Development Planning Agency, 2019: 2).

The implementation of the SDGs is carried out by involving all stakeholders: government and parliament, philanthropy, business actors, community organizations and the media, as well as academics and experts to ensure that the achievement of the SDGs is in line with the principles of inclusiveness and that nothing is left behind. There are several documents prepared for the implementation of the SDGs, including: Presidential Regulation and Ministerial Regulation for National Development Planning as a legal basis, technical guidelines for developing action plans, metadata for SDG indicators, communication strategies, and dissemination of SDGs to all stakeholders, at the national level and at the regional level (Voluntary National Review of the National Development Planning Agency, 2019: 2).

Universities or higher education occupy a unique position in society. With a broad scope around the creation and dissemination of knowledge, universities or higher education have long been powerful drivers of innovation at the global, national and local levels, economic development and community welfare (Sustainable Development Solutions Network, 2017: 7). Thus, it can be said that universities or higher education institutions have an important role in achieving SDGs.

Law number 12 of 2012 article 1 paragraph (9) explains that "the Tridharma of Higher Education is the obligation of Higher Education to carry out education, research, and community service". One of Indonesia's strengths in implementing the SDGs is the involvement of all stakeholders, both government and non-government, from planning, implementation, monitoring and evaluation and reporting. Stakeholders involved in the implementation of SDGs in Indonesia consist of 4 participatory platforms, namely the government and parliament (government and parliament), civil society organizations and media, philanthropy and business (philanthropy and business), and academics and academics and experts (Voluntary National Review of the National Development Planning Agency, 2019: 5). This deficiency arises due to the lack of attention of educational personnel printing institutions that pay attention to these skills (Waluyandi, 2020). Pohan (2020) states that at school, from elementary to secondary school or even college, students undergo, practice, and experience the learning process of various knowledge and skills. Learning is essentially a cognitive process that has the support of psychomotor functions (Arsani, 2020).

Since the launch of Indonesia's first Voluntary National Review (VNR) in July 2017, the implementation of SDGs has been supported by strong joint ownership by both government and non-government. Joint ownership is formalized with the issuance of Presidential Regulation No. 59 of 2017 concerning Achievement of Sustainable Development Goals. Joint ownership of the implementation of SDGs in Indonesia is proven by the establishment of SDGs Centers in several universities in Indonesia, this commitment is a manifestation of the desire to provide evidence-based support for policies by taking advantage of the strengths of related universities. The university that built the SDGs Center is expected to be able to assist local governments in developing their respective Regional

Action Plans (RAD) (VNR Indonesia 2019, 2019: 37). Based on Bappenas official social media, the 14 SDGs Centers in 14 universities are Padjajaran University, Jember University, Bengkulu University, Mataram University, Bogor Agricultural Institute, Bandung Institute of Technology, Hasanuddin University, University of Indonesia, Indonesian Banking Association (LPPI), Riau University, Gadjah Mada University, Andalas University, Artha Wacana Christian University and Lampung University.

Telkom University is a private university located in Bandung, West Java, Indonesia. Telkom University has a long-term vision until 2038, in accordance with the Development Master Plan (RENIP), namely "To become a World Class Entrepreneur University" (Telkom University, 2018). In 2019, Telkom University succeeded in becoming the best Private Higher Education (PTS) based on the Ministry of Research, Technology and Higher Education (Kemenristekdikti). Reporting from Kompas Daily Newspaper, Monday (27/04/2020), the role of universities in the world is now seen through 17 SDGs indicators and this has become a benchmark in the Impact Ranking. In the first 100 rankings, there are only 3 Indonesian universities, namely the University of Indonesia (47th), Gadjah Mada University (72nd), and the Bogor Agricultural Institute (77th). According to Nizam, Acting Director General of Higher Education, Ministry of Education and Culture, this achievement shows the role of universities in Indonesia in achieving the Sustainable Development Goals (Harususilo & Yohanes, 2020: 5).

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Telkom University as one of the private universities in Indonesia has highlighted the issue of Sustainable Development Goals (SDG / TPB) in supporting the realization of SDG goals through the rector's decision number: KR.0015 / LIT2 / PRS / 2020. The rector's decision stipulates as follows "the decision of the telkom university rector regarding the formation of an interdisciplinary collaborative research group in the field of disaster resilience (collaborative research group for disaster resilience and sustainable development (DSRD) Telkom University". Based on the Decree of the Telkom University Chancellor, it can be said that Telkom University has started to take part in realizing SDGs in the scope of higher education.

Then, this research is basically based on how individual students in the life of the academic community can contribute to sustainable development that allows individuals to face the special challenges of each SDG, to facilitate the achievement of sustainable development goals, is the urgency of this research. Because based on Law number 12 of 2012 concerning Higher Education Article 13 paragraph says that "Students as members of the Academic Community are positioned as adults who have their own awareness in developing their own potential in Higher Education to become intellectuals, scientists, practitioners, and / or professionals" and also in article 11 paragraph 5 states that "the Academic Community is obliged to maintain and develop an academic culture by treating Science and Technology as

processes and products as well as charities and moral paradigms". Based on the mandate of this law, it is considered important to know the role of students in developing their own potential to be able to contribute to social life and global life.

## II. Research Methods

Research can be designed to meet exploratory, descriptive, explanatory, evaluative, or a combination of these objectives, the research question posed will determine what the research objectives are (Saunders et al, 2016: 175). The purpose of this research is descriptive, where this type of descriptive study is conducted to determine and be able to explain the characteristics of the variables under study in a situation.

The term research philosophy or research paradigm refers to belief systems and assumptions about the development of knowledge (Saunders et al, 2016: 135). The paradigm used in this research is positivism. The purpose of positivism research is to emphasize a focus on rigorous scientific empirical methods designed to produce pure data and facts that are not influenced by human interpretation or bias about the topic under study, namely about SDGs number 4.4 in the context of Telkom University FKB students.

Saunders et al (2016: 144), reveal there are three approaches in theory development, namely deductive, inductive and abductive. The approach used in theory development is a deductive approach. Where in the deductive approach, research moves from theory to data.

According to Saunders et al (2016: 165), one way to distinguish quantitative research from qualitative research is to distinguish between numerical data (numbers) and non-numeric data (words, images, video clips, and other similar material). Creswell & Creswell (2018: 41), explain that there are three approaches in research methodology, namely qualitative, quantitative and mix methods. Based on the methodology, this research was conducted with a quantitative research methodology with a "survey research" approach. Where quantitative research is aimed at providing quantitative descriptions or numerical explanations of trends, attitudes, or opinions of a population by studying a sample of that population (Cresweel & Creswell, 2018: 49), where in the context of this research will measure the perceptions of the role of students in the FKB Telkom University.

In general, a strategy is a plan of action to achieve a goal. A research strategy can therefore be defined as a plan for how a researcher will answer his research question. This is the methodological relationship between philosophy and the choice of the next method to collect and analyze data (Denzin & Lincoln in Saunders et al, 2016: 177). Saunders et al (2016: 178) explain that there are eight strategies that can be used in research, namely, experiments, surveys, research archives & documentation, case studies, ethnography, action research, grounded theory and narrative questions. The strategy used in this research is a survey. Where the survey strategy allows researchers to collect quantitative data that can be used for quantitative analysis using descriptive statistics. According to Saunders et al (2016: 182), using a survey strategy will give more control over the research process and, when sampling, it is possible to produce findings that are statistically representative of the entire population at a lower cost than collecting data for the entire study population.

The unit of analysis refers to the level of data aggregation collected during the data analysis stage (Sekaran & Bougie, 2016: 102). Based on the unit of analysis, this research was conducted on the individual units of FKB Telkom University students. Where this research will look at the data collected from each individual student of FKB Telkom University and treat the responses of each student as an individual data source.

Based on the involvement of the researcher, in this study the involvement of the researcher is minimal intervention, where the researcher does not intervene in the activities

of the Respondent who is the object of the research (Sekaran & Bougie, 2013: 114).

Research can be carried out in a natural environment where events or incidents take place normally (non-contrived) or in an artificial setting (contrived) (Sekaran & Bougie, 2016: 100). The research background used in this study is non-contrived. Where research builds cause-and-effect relationships by using a natural environment where the subject under study usually has activities, in this case within the Telkom University campus.

Based on the time of implementation, this research is cross-sectional. Where data is collected only once during a daily, weekly or monthly period in order to answer research questions (Sekaran & Bougie, 201: 6104).

The population in this study were 6,748 students of FKB Telkom University as research respondents. In this study, the sampling technique used is probability sampling, because probability sampling is suitable for use with survey research strategies where the research needs to draw conclusions from a sample about a population to answer research questions and to meet the research objectives. Based on the determination of the sample using the Slovin formula, it was found that the number of samples needed for this study was 378 respondents.

The scale of the instrument used in this study was the Likert scale. The Likert scale is an addition approach that can touch certain concepts or variables so that it can be analyzed item by item and it is also possible to calculate the total or summation score for each questionnaire statement by adding up all items (Sekaran & Bougie, 2016: 216). In addition to measuring the agreement statement, the Likert scale can measure other variations such as frequency, quality, importance, and likelihood (McLeod, 2019). The Likert scale in this study consists of four options, this is chosen in order to avoid neutral answers from respondents.

This study used quantitative descriptive data analysis techniques, descriptive analysis was carried out to obtain a percentage of the respondents' perceptions of the aspects contained in Quality Education (SDG 4), Main Duties and Functions (TUPOKSI) of SDGs Center ITB as a contribution to Higher Education, and Strategy. To find out the respondents' perceptions of the variables to be studied, measurements were taken based on the respondents' answers to the questionnaire. The measurement used in this study uses a basic questionnaire technique with four answer scales that must be selected, then the assessment criteria for each statement item are compiled based on the percentage of respondents' answers.

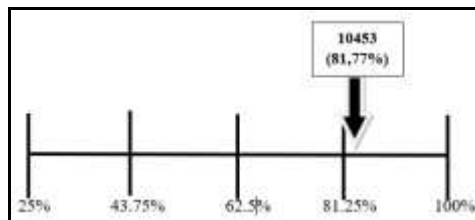
Then this study also uses cross tabulation analysis (crosstab) or the chi-square test, in principle, presenting data in tabulated form which includes rows and columns (Ghozali, 2018: 21). Gunawan (2020: 43) in his book also explains that, crosstab analysis or the chi-square test is used to display cross tabulations to describe data in columns and rows. Besides that, it can also be used to analyze the relationship between row and column variables. As part of inferential statistics, chi squared can be used to estimate and test hypotheses (Hadi, 2020: 279), Ghozali (2018: 24), explains that the chi squared test can also be used to test whether there is an association or relationship between variables observed.

And finally, in this study, the t-test was used to determine whether two unrelated samples had different mean values. The t-test is carried out by comparing the difference between the average value and the standard error of the difference in the mean of the two samples (Ghozali, 2018: 64). Gunawan in his book also says that the different sample T-test can be used to test two averages from two independent data groups (Gunawan, 2020: 74).

### III. Discussion

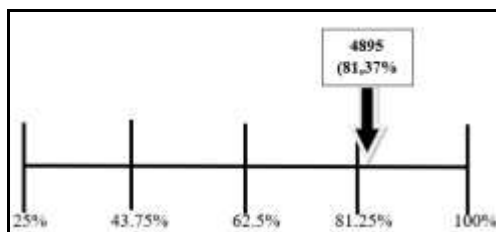
Respondents obtained in this study amounted to 381 students. Based on the type of faculty, respondents consisted of 193 (50.66%) students from the Faculty of Business Communication, Telkom University. Furthermore, based on gender, the research respondents consisted of 214 male students and 167 female students.

Contribution Dimensions of Higher Education within the scope of FKB students with the number of questionnaire items 18 items and the number of respondents 188 students, obtained a total score of 10453 or 81.77% and included in the "Very Good" category. Based on the results of the data processing, it was found that item number 13, namely "I understand that the Vision of the Faculty of Business Communication directs Community Service to Preparation for the World of Work (Employment)" received the highest response of 652 or 84.46%. This shows that the perception of Telkom University FKB students in understanding Community Service carried out by the faculty academic community has directed the field of Community Service to the preparation of the world of work for their students.



*Figure 1. Contribution Dimensions of Higher Education within the Scope of FKB Students*

Next, from the results of the data processing that has been done, the answers to the perception of the Quality Education dimension according to FKB students are obtained, the Quality Education dimension with 9 questionnaire items and the number of respondents as many as 188 students, obtained a total score of 4895. Based on the results of the data processing, it was found that the questionnaire item number 20, namely "I know of a program that will be supported by my faculty, Telkom University to prepare myself to enter the world of work (Employment)" received the highest response of 624 or 82.98%. This shows that FKB Telkom University students in knowing which programs will be supported by the academic community of the business communication faculty to enter the world of work are high and have received very good responses.

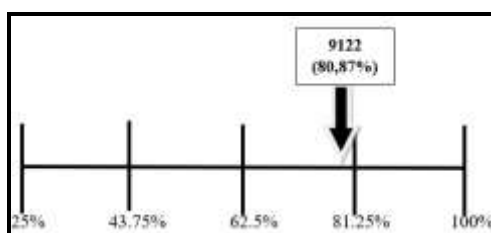


*Figure 2. The Results of the Data Processing*

Next, from the results of the last quantitative descriptive analysis carried out within the FKB scope, the Educational Dimension within the FKB student scope with a total of 15 questionnaire items and a total number of respondent's as many as 188 students, a total score of 9122 was obtained and entered the 'good' category. Based on the results of the respondents' responses, it was found that item number 28, namely "I know the important role of education as the main driving force to improve people's lives in achieving the Sustainable Development



Goals" received the highest response of 632 or 84.04%. This shows that FKB Telkom University students already know the role of education to improve people's lives and achieve sustainable development goals.



*Figure 3. The Results of the Last Quantitative Descriptive Analysis*

Then based on the results of the chi-square test, the results of the data processing that has been carried out with the SPSS 25 program, the chi square test results obtained from each indicator item in this study. With the hypothesis testing criteria, namely:

- If the calculated Chi Square value < Chi Square table, then Ho is accepted
- If the calculated Chi Square value > Chi Square table, then Ho is rejected

Based on the results of the chi square test above, from 42 research indicators measured against the type of student faculty, it was found that there were 7 (seven) research indicators which were stated to have a relationship with the type of student faculty, namely indicators with codes EM2, EN3, KU2, IC1, IC2, CI1 and CI2. Where these indicators are said to have a relationship with the type of student faculty because the calculated chi square number owned by the indicator is greater than the chi square table and with the testing criteria that have been determined in chapter 3 previously, the seven indicators meet the criteria to reject the Ho and It is stated that the hypothesis Ha is accepted and it can be interpreted that the measured research indicators have a relationship with the type of student faculty in this study.

Finally, based on the results of t-test data processing. This t-test is used to see whether there are differences in perceptions regarding the research indicators used and measured between students of the Faculty of Business Economics and the Faculty of Communication, University of Telkom. For more details, it will be shown in table 4.8 below. Then the results of the t-test and group statistics through the SPSS 25 program can be seen in Appendix D of this study. The following are the criteria for testing the hypothesis in this t-test analysis:

Based on the t test:

- a. If  $t_{count} > t_{table}$  or  $t_{count} < -t_{table}$ , it means that the null hypothesis (H0) is rejected.
- b. If  $t_{table} < t_{count} < t_{table}$  on, it means that the null hypothesis (H0) is accepted.

Based on Significance:

- a. If the Sig value > 0.05, means there is no difference, or the null hypothesis (H0) is rejected.
- b. If the Sig value < 0.05 means that there is a difference in the null hypothesis (H0) is accepted.

Based on the results of the different t-test that has been done, statistically it can be seen that 11 (eleven) of the 42 (forty-two) indicators of this study found that there are differences in perceptions between FKB Telkom University students and 31 (thirty one) indicators The research stated that there was no difference in perceptions between FKB Telkom University students which could be said to be the same. Conclusion is made through statistical test criteria, namely, if  $t_{count} > t_{table}$  or  $t_{count}$  or if the value of Sig > 0.05 then the null hypothesis (H0) is rejected, meaning there is no difference. The 11 (eleven) research indicators that were stated to be different were indicators with item codes PD2, EM1, DJ1, EN3, KU1, KU2, KU5, IC2, CI1, CI2 and CI3.

## IV. Conclusion

Overall, the three dimensions related to SDGs 4.4 which have been measured through the perceptions of students of the the Faculty of Business Communication at Telkom University have been included in the 'Very Good' category except for the ESD dimension of Telkom University Education within FKB, and based on the results of the analysis of the chi square test that has been done and discussed in chapter 4 and the conclusions in chapter 5, it can be said that 7 (seven) of the 42 (forty-two) indicator items in this study are stated to have a relationship or association with the the Faculty of Business Communication University.

Then based on the results of the different t-test, 11 (eleven) of the 42 (forty-two) research indicator items were stated to have differences between the scope of FKB. Therefore, the results of this study can be used as a reference for stakeholders in the scope of FKB of Telkom University to try to examine the indicator items in this study which have been stated to have a relationship with the type of faculty to be discussed and focused on to be developed in the form of policies, programs and formation. courses that will be undertaken by FKB students. Based on the results of the different t-test on 42 (forty-two) indicators of this study, only 11 (eleven) indicators were found to have statistically different results in the scope of FKB, this could be the basis and reference for FKB. to see and sharpen the specialization in each field to achieve sustainable development.

Then from the results of different tests, it was also found that 31 (thirty-one) indicators in this study were considered statistically the same, this could be input for FKB stakeholders in formulating policies and conducting research between fields of study in order to improve work. the same between faculties for sustainable development, because it has 31 indicator items which are stated to be the same between faculties. This can also be an input for Telkom University to examine the need to form a coordinating body to oversee cooperation or fusion of several programs, agendas and activities within the scope of FKB in realizing sustainable development because in this study it was found that based on the perceptions of FKB students have a lot in common in carrying out sustainable development. This can be a basis or reference for FKB stakeholders in formulating policies and conducting research between fields of study in order to increase cooperation between faculties for sustainable development.

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