

Original Article

# Perceived Value on Adapting to Online Study: Indonesian Student Perspectives during the COVID-19 Pandemic Period

Ni Nyoman Kerti Yasa<sup>1</sup>, Putu Laksmi Dewi Rahmayanti<sup>2</sup>, I Gusti Ngurah Jaya Agung Widagda<sup>3</sup>,  
Ida Bagus Agung Dharmanegara<sup>4</sup>, I Wayan Gde Sarmawa<sup>5</sup>

<sup>1,2,3</sup> Udayana University, Bali, Indonesia

<sup>4,5</sup> Warmadewa University, Bali, Indonesia

Received Date: 17 July 2020

Revised Date: 25 August 2020

Accepted Date: 30 August 2020

**Abstract** - The purpose of this study is to give an idea of the perceived value of students on the adoption of online lectures in Indonesia. The research population is all students in Indonesia who have attended online lectures. The size of the sample taken as many as 500 people with the descriptive analysis method. The results showed that online lectures provide perceived values that include functional values, emotional values, epistemic values, social values, conditional values, and economic values. Of the six types of perceived value, it turns out that emotional value is the highest felt by students, followed by functional value, social value, epistemic value, and economic value. This has implications for stakeholders in the field of higher education so that online lectures are developed further because they provide benefits to students on all dimensions of benefits, but the main focus that needs to be improved is on functional value.

**Keywords** - Perceived value, functional value, emotional value, social value, epistemic value, conditional value, and economic value.

## I. INTRODUCTION

The spread of the Corona Virus pandemic that hit the world has also hit Indonesia. The plague caused by Corona Virus, known as COVID-19, has caused changes in many sectors, from the economic, social to the education sector. In Indonesia, the teaching and learning system is more dominated by offline or face-to-face learning models. The COVID-19 virus outbreak automatically caused a change from an offline system to an online teaching and learning model. The application of online lectures, of course, in Indonesia, is a model for lectures throughout Indonesia in the Context of participating in the process of implementing government programs, namely learning from home. The online college model has been widely applied in several countries, including China, Britain, and the U.S.U.S. Likewise, several previous researchers have studied research on online lectures, including [12]; [1]; [14]; [3]; [8], and have had a positive impact [10].

The online lectures that have been implemented indeed can benefit students. The research results by [11] show that attending online lectures has the benefit of sharing information and experiences among college participants. Previously, several researchers also showed the results that online lectures provided benefits such as sharing new skills and knowledge [15], informational benefits, and relational benefits [22], and emotional value and social value [6].

Seeing the existing phenomena about the application of online lectures in Indonesia, it is necessary to study the perceived value of the adoption of online lectures from students' perspectives. In this research, there is the development of the measurement of perceived value variables from online lectures. In a study from [23], perceived value consisted of 5 dimensions, and in this study, one was added with economic value. This is due to the results of interviews with 25 students who attended online lectures in Indonesia. They felt that from the expense side, there was an impact. Namely, they were saving in transportation costs to campus, rented rooms, but they had to add expenses to the internet costs. This is consistent with the research [2], which states that online lectures require internet access. Based on the existing phenomena, this study wants to give an overview or description of the perceived value that is comprehensively felt by students attending online lectures in Indonesia viewed from functional value, emotional value, social value, epistemic value, conditional value, and economic value.

## II. LITERATURE REVIEW AND CONCEPT FRAMEWORK

### A. Perceived Value

Perceived value is the value of the benefits felt by consumers when consuming a product [22]; [22]; [22], where consumers feel the functional value, emotional value, social value, epistemic value, and conditional value [23]. The concept of perceived value can be measured



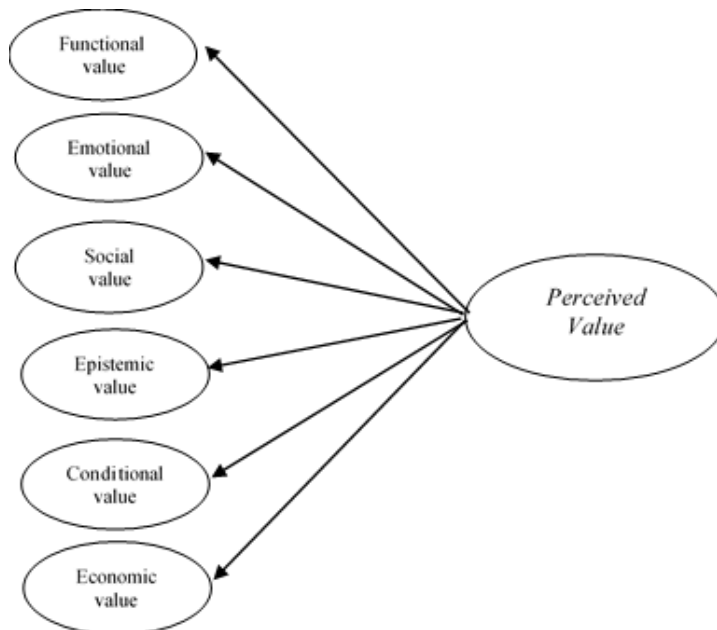
using multi-dimensional constructs or without dimensions [5]. Also, according to [23], the perception of the benefits of online lectures causes students to feel a comfortable atmosphere in a learning environment (emotional value); Another perceived value of online lectures is the occurrence of discussions between students and lecturers [15]. This shows some of the benefits gained from the online lecture. Furthermore, [23] also said that perceived value is perceived benefit by students from online lectures measured by five dimensions, namely: functional value, emotional value, social value, epistemic value, and conditional value. There is also a measure of perceived value from perceived comfort [9].

Functional value is a function or benefit of a product in carrying out its functions. In this case, the product can provide benefits by its function, such as online lectures to deliver learning material from lecturers to students. Online lectures can meet students' needs to get course material [22], so online lectures carry out their functions as a medium for teaching and learning. According to [22], emotional values are usually positive feelings or negative emotions that consumers can feel when consuming a product. Epistemic value is a different feeling felt by consumers from consuming certain products [22]; [22]. [4] states that consumers feel epistemic value when using new technology products. Likewise, [22] state that when using new technology, consumers get a different situation [13].

According to [23], emotional value usually, consumers buy a product or use a product to maintain their self-image. Consumers can feel positive emotions or negative emotions from consuming a product. According to [7], conditional values usually occur if the use of technology in education enables students to access the learning process anywhere as long as there is internet access. This is a form of innovation in the field of teaching and learning. According to [2], online lectures require internet access. Therefore, the adoption of online tuition certainly has an impact on changes in spending on internet costs. This is an economic aspect that is felt by consumers. Besides the additional costs that must be incurred, of course, there are also cost savings that occur with this learning model, including savings in transportation costs to campus and savings in room rental costs for students who previously rented houses.

**B. Research Conceptual Framework**

Perceived value is the total value of benefits perceived by consumers in consuming products [22]; [23]; [22]. Perceived value consists of several value dimensions, including: 1) functional value; 2) emotional value; 3) social value; 4) epistemic value; 5) conditional value; and 6) economic value. If this dimension is depicted in the form of a conceptual framework, it will be presented in Fig. 1.



**Fig. 1 Research Mode**

**III. RESEARCH METHODS**

When viewed from the problem, this research is descriptive. This study aims to describe the perceived value of students attending online lectures. This research was conducted by students in Indonesia who took part in online studies during the Covid-19 pandemic. The number of samples taken was as many as 500 people, with descriptive analysis tools. The operational definition of a variable is a conceptual definition that is applied to

research subjects. Each research variable or indicator is defined as follows:

**Functional Value.** The first variable in this study is the functional value (X1), which is measured by six indicators, according to [23]. The indicators in measuring functional value are as follows: 1). Gives complete information. 2). Give accurate material. 3). Easy to understand. 4). Easy to

comprehend. 5). Creating interactive. 6). Creating communication

Emotional value. 3 indicators measure the personal value variable. Indicators in measuring emotional value used in this study are sourced from [23], among others, as follows: 1). Gives happiness. 2). Gives joy. 3). Creating a sense of pleasure

Social value. The social value variable uses 3 indicators in assessing the social value of online lectures in Indonesia, which was adapted from [23]. The indicators to measure social value are as follows: 1). People who understand technology. 2). People with a high image. 3). People who follow technology trends.

Epistemic value. The epistemic value variable uses 3 indicators adapted from [22] and [23]. The indicators to measure epistemic value are as follows: 1). Curiosity motivation. 2). Add new experiences. 3). Add a new method

Conditional value. The conditional value variable uses 3 indicators adopted from [23]. The indicators to measure conditional value are as follows: 1). They were overcoming unsuitable conditions. 2). The best alternative method if traveling. 3). Flexible according to existing conditions

Economic value. The economic value variable uses 2 indicators developed after seeing the phenomenon in Indonesia that the adoption of online lectures has led to additional internet costs [2], although there are savings in transportation costs, so the measurement of economic value variables consists of two indicators as follows: 1). Save on transportation costs. 2). Add internet fees

Each research variable or indicator is classified as follows:

**Table 1. Research Variables Constructs and Indicators**

| <b>Construct</b>              | <b>Indicator</b>   | <b>Source</b>              |
|-------------------------------|--|----------------------------|
| <i>Functional value (X1)</i>  | 1. Gives complete information<br>2. Give accurate material<br>3. Easy to understand<br>4. Easy to comprehend<br>5. Creating interactive<br>6. Creating communication | [23].                      |
| <i>Emotional value (X2)</i>   | 1. Gives happiness<br>2. Gives joy<br>3. Creating a sense of pleasure  | [23].                      |
| <i>Social value (X3)</i>      | 1. Understand technology<br>2. High image<br>3. Follow the technology trends   | [23].                      |
| <i>Epistemic value (X4)</i>   | 1. Motivational curiosity<br>2. Add new experiences<br>3. Add a new method   | [22]; [23].                |
| <i>Conditional value (X5)</i> | 1. Overcoming unsuitable conditions<br>2. Alternative if traveling<br>3. Flexible  | [22]; [23].                |
| <i>Economic value (X6)</i>    | 1. Save on transportation costs.<br>2. Add internet fees.  | [2] and field observations |

The research population is all students who have attended online lectures in Indonesia. This study's sample size was as many as 500 people to represent students who attended online lectures during the Covid-19 pandemic in Indonesia.

Indicators of perceived value variables with six dimensions are measured by students' perceptions of attending online lectures using a five-level Likert scale, namely from strongly disagree = 1, disagree = 2, quite agree = 3, agree = 4, and strongly agree = 5. Variable measurements will be carried out in early May 2020 until the end of June 2020.

This study uses primary data, namely data obtained from distributing online questionnaires in the form of google forms, which respondents answered; in this case, students who have attended online lectures in Indonesia. The instruments used were tested for validity and reliability to measure what they wanted to calculate and to

know the respondents' consistency of responses. Testing the instrument's validity using the Pearson Product Moment correlation technique with a minimum limit of  $r = 0.3$ . Instrument reliability testing is done by calculating the reliability coefficient of Cronbach's Alpha with a minimum limit of Alpha coefficients  $> 0.6$ . Both tests use the S.P.S.S.P.S.S. computer program. This analysis is used to describe the research variables without drawing generalizations. The collected data is then tabulated in a table and discussed in a descriptive analysis.

**IV. RESEARCH RESULTS AND DISCUSSION**

Validity testing is done by calculating the Pearson Correlation value. The questions in the questionnaire are said to be valid if the correlation coefficient of  $\geq 0.03$  [17]. The following are the validity test results presented in Table 2.

**Table 2. Validity Test Results**

| No. | Variable                            | Indicator        | Coef. Correlation | Information |
|-----|-------------------------------------|------------------|-------------------|-------------|
| 1   | <i>Functional value (X1)</i>        | X <sub>1.1</sub> | 0,824             | Valid       |
|     |                                     | X <sub>1.2</sub> | 0,860             | Valid       |
|     |                                     | X <sub>1.3</sub> | 0,838             | Valid       |
|     |                                     | X <sub>1.4</sub> | 0,826             | Valid       |
|     |                                     | X <sub>1.5</sub> | 0,821             | Valid       |
| 2   | <i>Emotional value (X2)</i>         | X <sub>2.1</sub> | 0,967             | Valid       |
|     |                                     | X <sub>2.2</sub> | 0,982             | Valid       |
|     |                                     | X <sub>2.3</sub> | 0,960             | Valid       |
| 3   | <i>Social value (X<sub>3</sub>)</i> | X <sub>3.1</sub> | 0,892             | Valid       |
|     |                                     | X <sub>3.2</sub> | 0,882             | Valid       |
|     |                                     | X <sub>3.3</sub> | 0,859             | Valid       |
| 4   | <i>Epistemic value (X4)</i>         | X4.1             | 0,862             | Valid       |
|     |                                     | X4.2             | 0,923             | Valid       |
|     |                                     | X4.3             | 0,905             | Valid       |
| 5   | <i>Conditional value (X5)</i>       | X5.1             | 0,747             | Valid       |
|     |                                     | X5.2             | 0,831             | Valid       |
|     |                                     | X5.3             | 0,817             | Valid       |
| 6   | <i>Economic value (X6)</i>          | X6.1             | 0,933             | Valid       |
|     |                                     | X6.2             | 0,923             | Valid       |

Source: Primary data, processed (2020)

Reliability testing shows the extent to which the gauge is reliable. This test is performed on instruments with the Cronbach's Alpha coefficient, if greater than 0.60, the instruments used are reliable. The following table presents the results of the reliability test.

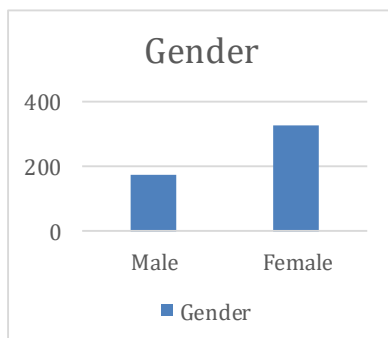
**Table 3. Reliability Test Results**

| No. | Variable                 | Cronbach Alpha | Information |
|-----|--------------------------|----------------|-------------|
| 1   | <i>Functional Value</i>  | 0,887          | Reliable    |
| 2   | <i>Emotional Value</i>   | 0,967          | Reliable    |
| 3   | <i>Social Value</i>      | 0,851          | Reliable    |
| 4   | <i>Epistemic Value</i>   | 0,871          | Reliable    |
| 5   | <i>Conditional Value</i> | 0,708          | Reliable    |
| 6   | <i>Economic Value</i>    | 0,839          | Reliable    |

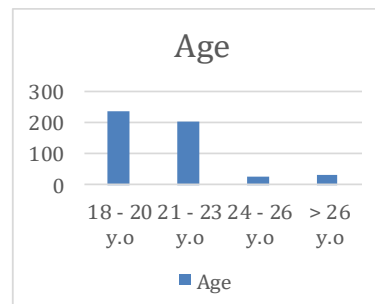
Source: Primary data, processed (2020)

Table 3 shows that the three research instruments, namely functional value, emotional value, social value, epistemic value, conditional value, and economic value, have Cronbach Alpha coefficients greater than 0.60. These results indicate that all variables in this study are reliable so that they can be used as research instruments.

Furthermore, about the characteristics of respondents in this study, as many as 500 people have demographic characteristics, as follows:



**Fig. 2 Characteristics of Respondents by Gender**



**Fig. 3 Characteristics of Respondents by Age**

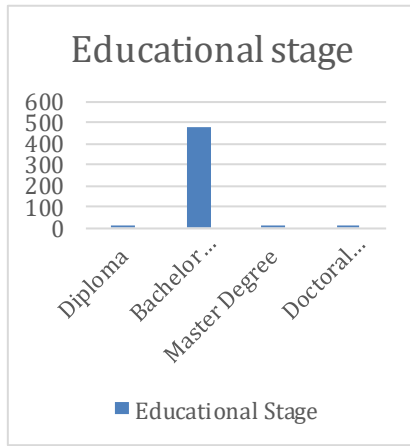


Fig. 4 Characteristics of Respondents Based on Their Level of Education

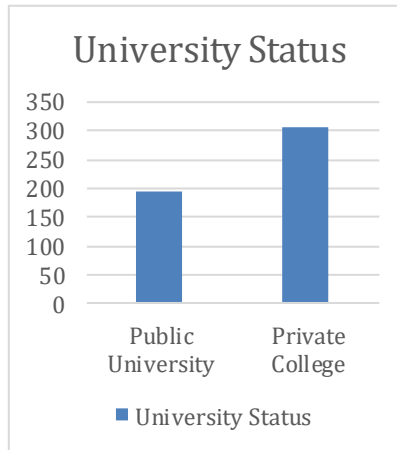


Fig. 5 Characteristics of Respondents Based on University Status

Fig. 2, 3, 4, and 5, explain that there are more female respondents than male respondents where female respondents are 325 people while male respondents are 175 people. When viewed by age, the majority of respondents aged 18-23 years were 444 people. Based on the level of education it can be seen that as many as 11 people are students in the Diploma Program, 480 people, are students at the S1 level, as many as 2 people at the S2 level, as many as 7 people at the S3 level. Furthermore, 193 people came from students of State Universities and 307 people came from students of Private Universities Next, a descriptive analysis is carried out to find out the respondent's response to each statement. All variables are described using the average value. The assessment of the data distribution of each variable uses a range of criteria calculated by the equation:

$$\text{Interval Value} = \frac{(\text{Highest limit value} - \text{the lowest limit value})}{\text{Total value}} \dots\dots(1)$$

$$= \frac{(5-1)}{5} = 0,8$$

Based on the results of the interval range, the construct measurement results criteria can be arranged in Table 4.

Table 4. Summary of Research Variable Score Intervals

| [1] Score Value | [2] Score Criteria           |
|-----------------|------------------------------|
| [3] 1,00 - 1,80 | [4] Very not high / Very Low |
| ➤ 1,80 - 2,60   | [5] Not high / low           |
| ➤ 2,60 - 3,40   | [6] High enough              |
| ➤ 3,40 - 4,20   | [7] High                     |
| ➤ 4,20 - 5,00   | [8] Very High                |

The measurement criteria indicate that the higher the average value obtained shows the better the response of respondents to these items and variables. The descriptions for each research variable are explained as follows, as presented in Tables 5, 6, 7, 8, 9, and 10.

Table 5. Description of Respondent's Answers Regarding Valuation of Functional Value Variables

| No. | Variable Functional Value (X1) Statement             | Respondent's Answers |     |     |     |    | Total. Res. | Avera ge | Info.       |
|-----|--|----------------------|-----|-----|-----|----|-------------|----------|-------------|
|     |  | 1                    | 2   | 3   | 4   | 5  |             |          |             |
| 1   | Online lectures provide complete information (X.1.1) | 35                   | 132 | 189 | 122 | 22 | 500         | 2,93     | High enough |
| 2   | Online lectures provide accurate information (X.1.2) | 33                   | 155 | 202 | 195 | 15 | 500         | 3,61     | High enough |

|         |   |    |     |     |     |    |     |      |             |
|---------|---|----|-----|-----|-----|----|-----|------|-------------|
| 3       | Online lectures are easy to understand (X.1.3)        | 38 | 125 | 226 | 96  | 15 | 500 | 2,85 | High enough |
| 4       | Online lectures provide two-way communication (X.1.5) | 30 | 99  | 201 | 130 | 40 | 500 | 3,10 | High enough |
| 5       | Online lectures provide discussion space (X.1.6)      | 45 | 128 | 189 | 113 | 25 | 500 | 2,89 | High enough |
| Average |   |    |     |     |     |    |     | 3,08 | High enough |

Source: Primary Data Processed, 2020

Based on the data Table 5 shows that 5 statements about functional value obtained an average value of 3.08 and included in the criteria with a rating category of 2.60 - 3.40 which is quite high. This means that students in Indonesia who were respondents in this study gained functional value by attending online lectures, in general, is quite high. The highest benefit is felt in the variable indicators that online lectures provide accurate information.

**Table 6. Description of Respondent's Answers Regarding Assessment of Emotional Value Variables**

| No.     | Statement of Emotional Value Variables (X2) | Respondent's Answers |    |     |     |    | Total. Res. | Average | Info.       |
|---------|---|----------------------|----|-----|-----|----|-------------|---------|-------------|
|         |   | 1                    | 2  | 3   | 4   | 5  |             |         |             |
| 1       | Online lectures give happiness (X2.1)       | 39                   | 76 | 192 | 137 | 56 | 500         | 3,19    | High enough |
| 2       | Online lectures give joy (X2.2)             | 39                   | 87 | 194 | 125 | 55 | 500         | 3,14    | High enough |
| 3       | Online lectures give pleasure (X2.3)        | 42                   | 86 | 196 | 121 | 55 | 500         | 3,12    | High enough |
| Average |   |                      |    |     |     |    |             | 3,15    | High enough |

Source: Primary Data Processed, 2020

Based on data Table 6 shows that the 3 statements about emotional value from online lectures obtained an average value of 3.15 and included in the criteria with an assessment category of 2.60 - 3.40, which is a high enough category. This means that students in Indonesia consider getting quite high emotional value from online lectures. Of the three emotional value variable indicators, it turns out that the feeling of pleasure attending an online lecture received the highest rating in emotional value.

**Table 7. Description of Respondent's Answers Regarding Assessment of Social Value Variables**

| No.     | Social Value Variable Statement (X3)       | Respondent's Answers |    |     |     |     | Total. Res. | Average | Info.       |
|---------|--|----------------------|----|-----|-----|-----|-------------|---------|-------------|
|         |  | 1                    | 2  | 3   | 4   | 5   |             |         |             |
| 1       | People who understand technology (X3.1)    | 12                   | 40 | 151 | 204 | 93  | 500         | 3,65    | High        |
| 2       | People who have a high image (X3.2)        | 28                   | 93 | 208 | 128 | 43  | 500         | 3,13    | High enough |
| 3       | People who follow technology trends (X3.3) | 9                    | 27 | 110 | 203 | 151 | 500         | 3,92    | High        |
| Average |  |                      |    |     |     |     |             | 3,57    | High        |

Source: Primary Data Processed, 2020

Based on the data Table 7 shows that the 3 statements about social value obtained an average value of 3.57 and included in the criteria with an assessment category from 3.40 to 4.19, namely high. This means that the social value felt by students attending online lectures in Indonesia who were respondents in this study already felt high benefits from online lectures. The high benefits are indicated by the variable indicators that feel they are people who follow the technology trends.

**Table 8. Description of Respondent's Answers Regarding Evaluation of the Epistemic Value Variable**

| No.     | Epistemic Value Variable Statement (X4) | Respondent's Answers |    |     |     |     | Total. Res. | Average | Info. |
|---------|---|----------------------|----|-----|-----|-----|-------------|---------|-------|
|         |   | 1                    | 2  | 3   | 4   | 5   |             |         |       |
| 1       | Add curiosity (X4.1)                    | 14                   | 42 | 172 | 197 | 75  | 500         | 3,55    | High  |
| 2       | Add new experiences (X4.2)              | 4                    | 21 | 93  | 251 | 131 | 500         | 3,97    | High  |
| 3       | Add a new method (X4.3)                 | 7                    | 20 | 103 | 235 | 135 | 500         | 3,94    | High  |
| Average |   |                      |    |     |     |     |             | 3,82    | High  |

Source: Primary Data Processed, 2020

Based on the data Table 8 shows that 3 statements about epistemic value obtained an average value of 3.82 and included in the criteria with an assessment category from 3.40 to 4.19, which is high. This means that the epistemic value felt by students attending online lectures in Indonesia who were respondents in this study already felt that online lectures had high benefits on epistemic value. The highest benefit to epistemic value is felt in the benefits of adding new experiences.

**Table 9. Description of Respondent's Answers Regarding the Assessment of Conditional Value Variables**

| No.     | Conditional Value Variable Statement (X5) | Respondent's Answers |    |     |     |     | Total. Res. | Average | Info. |
|---------|---|----------------------|----|-----|-----|-----|-------------|---------|-------|
|         |   | 1                    | 2  | 3   | 4   | 5   |             |         |       |
| 1       | The situation is not appropriate (X5.1)   | 11                   | 29 | 165 | 173 | 122 | 500         | 3,73    | High  |
| 2       | If traveling (X5.2)                       | 7                    | 21 | 82  | 190 | 200 | 500         | 4,11    | High  |
| 3       | Flexible (X5.3)                           | 5                    | 34 | 100 | 177 | 184 | 500         | 4,00    | High  |
| Average |   |                      |    |     |     |     |             | 3,95    | High  |

Source: Primary Data Processed, 2020

Based on the data Table 9 shows that the 3 statements about conditional value obtained an average value of 3.95 and included in the criteria with an assessment category from 3.40 to 4.19, namely high. This means that the conditional value felt by students who take online lectures in Indonesia who are respondents in this study already feel they get high benefits from online lectures and the highest benefits are felt in conditional values because online lectures can be followed if they are traveling.

**Table 10. Description of Respondent's Answers Regarding Valuation of Economic Value Variables**

| No.     | Economic Value Variable Statement (X6) | Respondent's Answers |    |    |     |     | Total. Res. | Average | Info. |
|---------|--|----------------------|----|----|-----|-----|-------------|---------|-------|
|         |  | 1                    | 2  | 3  | 4   | 5   |             |         |       |
| 1       | Save transportation costs (X6.1)       | 20                   | 27 | 97 | 138 | 218 | 500         | 4,01    | High  |
| 2       | Add internet fees (X6.2)               | 13                   | 40 | 94 | 156 | 197 | 500         | 3,97    | High  |
| Average |  |                      |    |    |     |     |             | 3,99    | High  |

Source: Primary Data Processed, 2020

Based on the data in Table 10 shows that the 2 statements about economic value get an average value of 3.99 and fall into the criteria with an assessment category from 3.40 to 4.19, which is high. This means that the economic value perceived by students attending online lectures in Indonesia who are respondents in this study already feels that online lectures provide high benefits on economic value. The benefits felt by students are on the occurrence of savings in transportation costs to campus, although students also feel the additional high internet costs.

Furthermore, if the average perceived value by students in Indonesia is based on six dimensions, it can be seen in Fig. 6. In general, students in Indonesia find it beneficial to attend online lectures. These results are consistent with the results of research from previous researchers, such as [22]; [23]; [22].

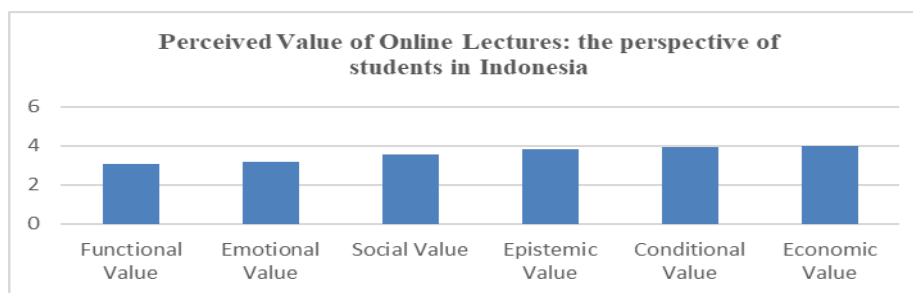


Fig. 6 Comparison of Perceived Values of Online Lectures Based on Six Dimension

## V. CONCLUSION

Based on the results of descriptive analysis, it can be concluded that four benefits are felt to be high from the adoption of online lectures, namely: social value, epistemic value, conditional value, and economic value, while there are two benefits felt enough by students, namely functional value and emotional value. This means that the higher education institution should focus on improving functional value and emotional value. Also, it continues to make efforts to increase other benefits because in general, it has not achieved very high benefits.

## VI. RESEARCH IMPLICATIONS

The implications of this research are theoretically able to increase the scope of perceived value. Previously, online learning research explained that the perceived value includes functional values, emotional values, social values, and conditional values. In this study, it turns out that perceived value is also complemented by economic value felt by online college users. This research also contributes practically to higher education institutions in Indonesia, online lecture models can be used as alternatives for future lectures in Indonesia, higher education institutions can begin to reduce physical facilities such as college buildings and replace facilities towards information technology facilities as well as thinking about free internet access so that additional internet costs do not occur again.

## VII. LIMITATIONS AND FUTURE RESEARCH

This research was carried out within a period of two months during the initial occurrence of the C.O.V.I.D.C.O.V.I.D. - 19 pandemic, so it could not be generalized later in the normal period. Also, this research is only limited to using descriptive analysis, so future research needs to proceed with an inferential approach by linking perceived value variables with other variables as impacts, such as student satisfaction variables, the desire to continue attending online lectures, and trust in online lectures.

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