Characteristics of brown rice demand in Makassar City

Mahyuddin, Tamzil Ibrahim and A N Fadyah
Agribusiness Study Program, Department of Socio-economics of Agriculture, Faculty of Agriculture, Hasanuddin University, Makassar, Indonesia

Email: mahyuddinr@yahoo.com

Abstract. The demand for brown rice keeps continuing to increase along with people's prosperity, which is marked by higher prices than ordinary rice. This research aims to know about the characteristic of brown rice demand from consumers, environment, and volume of brown rice itself and also to maintain the correlation between consumer characteristics and the environment with the volume of brown rice in Makassar city. This research is taking time about one month from January until April 2018. Sample of this research using random sampling with 96 respondents. Methods of analyzing data using Descriptive analysis and Chisquare analysis. The result of this research can be concluded that respondents who consume the brown rice were dominated by the female with 40 years above age, married status, the job as a civil servant, and educated. Another result concluded that there is no correlation between consumer characteristics and volume of brown rice’s demand based on respondent identities such as by gender, age, education, and revenue status of the respondent. There is a correlation between consumer characteristic with the volume of brown rice based on the number of family members who consumed the brown rice, their reason for consumption, the intensity of purchase and frequency of purchase. On the other side, there is no correlation between the characteristics of the environment with the volume of brown rice based on place distance, services, the scope of transportation service, place of origin, taste, the feeling of purity, and the color of brown rice itself. And there is a correlation between the characteristic of environmental with the volume of brown rice based on place of purchase and the quality of brown rice.

1. Introduction
The journey of Indonesian agricultural development to date has not been able to show maximum results when viewed from the level of welfare of farmers and their contribution to national income. Agricultural development in Indonesia is considered important from the overall national development. There are several things that underlie why agricultural development in Indonesia has an important role, among others: the potential of large and diverse natural resources, the share of national income which is quite large, the large share of national exports, the large population of Indonesia who depends their lives on this sector, its role in providing food to the community and becoming the basis of rural growth [1].

One of the most consumed agricultural products by the people of Indonesia is rice because rice is the staple food of Indonesian people. Rice is a very important commodity because more than 90% of Indonesian people consume rice. Paying attention to the safety of staple foods is very important. Health and food safety factors also become the main priority [2].
Based on the color of rice, in Indonesia, there are several types of rice, such as white rice, black rice, sticky rice, and brown rice. Brown rice is generally consumed without going through a process of milling, but only ground into broken rice, the skin of the rain is still attached to the endosperm. This brown rice husk is rich in natural oils, essential fats, and fiber [3].

Brown rice marketing must be based on demand characteristics, consumer characteristics, and environmental characteristics. The study of consumer behavior can be used as a basis for analyzing the business environment. For businesses, consumer behavior will become an important foundation in marketing, so that it can target buyers in a more directed direction because businesses can describe in detail the consumers who are targeted [4].

Of the majority of adults who consume brown rice, most are people who are very concerned with their health, such as the elderly who have or are potentially affected by heart disease, cancer, and diabetes. Some young people already consume them, which are usually aimed at losing weight, then they are included Brown rice is one of the menus in their daily nutrition intake.

In Makassar City, brown rice has a higher price of Rp. 15,000 / kg-Rp.22,000 / kg compared to white rice, which is only Rp.7,500 / kg due to the quality of its nutritional content and post-harvest processing, which is heavier than the process of producing white rice [5].

2. Methods

This research was conducted in Makassar City, South Sulawesi Province. The location determination was carried out with consideration that Makassar City was the biggest consumer of brown rice demand in South Sulawesi Province. The time of the study was conducted from January to April 2018. The population was all members of the research subjects who had characteristics in common. As for the population in this study are people who buy and consume brown rice in Makassar City. In this study, the number of people who buy and consume brown rice in Makassar City is not known with certainty, so to calculate the minimum number of samples needed using the Lemeshow formula for an unknown population.

\[ n = \frac{z^2 \times p(1-p)}{d} \]

Information :
\( n \) = Number of samples
\( z \) = z score at 95% confidence = 1.96
\( p \) = maximum estimate = 0.5
\( d \) = alpha (0.10) or sampling error = 10%

So if based on the formula, then the obtained \( n \) is 96 people, so in this study, the author must at least take data from a sample of at least 96 people.

The data collected must be proven true, timely, appropriate, and can provide a comprehensive picture. Then the type of data used is quantitative data and qualitative data. Quantitative data, i.e., data in the form of numbers, can be calculated, which is obtained from the calculation of the questionnaire to be performed relating to the problem under study. Qualitative data is data not in the form of numbers, obtained from interviews with respondents relating to the problem under study.

The data sources needed in this study are primary data and secondary data. Primary data is data obtained or collected directly in the field by the person doing the research or the person concerned who needs it. Primary data obtained by researchers from respondent's identity data such as name, age, occupation as well as questionnaire results about the marketing mix and consumer purchasing decisions that have been filled out by respondents. Secondary data is data obtained or collected by people who conduct research from existing sources. This data is used to support primary information that has been obtained, namely from library materials, literature, previous research, books, and so on Hasan [6].
Primary Data Collection. This stage aims to collect relevant data regarding this research and the condition of the research locations obtained, namely traditional and modern markets in Makassar City.

This stage consists of 4 stages, namely data tabulation, data analysis, interpretation of outcome data as well as research reports and thesis making, each of which will be described. Data tabulation is the stage where primary data or secondary data that have been obtained from the data collection stage are collected and then entered into a table. This stage is intended to make it easier to compile and categorize data according to their respective groups. From these tables, results can be drawn based on statistical figures.

The first objective is to determine the characteristics of brown rice consumers in Makassar City. To get the results of the first objective, the researchers used descriptive data analysis. Descriptive analysis is an analysis that describes a phenomenon, event, event that is happening at the present time. Descriptive analysis is used to see the characteristics of consumers and the environment of brown rice in Makassar City.

The second objective is to determine the relationship between consumer characteristics and the environment with the volume of brown rice demand; this study uses chi-square data analysis. Chi-square analysis is an analysis to test the estimation or estimation of the presence or absence of frequencies between one category and another category in a sample of a matter. According to Sugiyono [7], the formula used in the chi-square analysis is:

\[ \chi^2 = \sum \frac{(f_0 - f_n)^2}{f_n} \] (2)

Information:
\[ \chi^2 = \text{Chi-Square} \]
\[ f_0 = \text{Frequency observed} \]
\[ f_n = \text{Expected frequency} \]

The significant level used is \( a = 0.05 \), and the degree of freedom for the chi-square distribution is:

\[ \text{Df} = (I-1)(J-1) \] (3)

Information:
\[ I = \text{Number of lines} \]
\[ J = \text{Number of Columns} \]

Test Criteria:
1. H0 is accepted H1 is rejected if \( X^2 \) count < \( X^2 \) table, otherwise H0 is rejected, and H1 is accepted, if \( X^2 > X^2 \) table
2. Standard Correlation Coefficient Value, namely:

| Correlation Coefficient Value | Interpretation            |
|------------------------------|---------------------------|
| Between 0.801 to 1.000       | Very Strong               |
| Between 0.601 to 0.800       | Strong                    |
| Between 0.401 to 0.600       | Quite Strong              |
| Between 0.201 to 0.400       | Weak                      |
| Between 0.000 and 0.200      | Very weak                 |
3. Result and discussion

3.1. Description of frequency characteristics of consumers

Consumer Characteristics are the characteristics or traits that shape a consumer in making a decision to consume the product. Indicators of consumer characteristics in this study include gender of consumers, marital status of consumers, age of consumers, level of consumer education, consumer occupation, income, number of family members of consumers, consumer purchase intensity, frequency of consumer purchases, reasons for consuming, and interest in consuming by a member of the consumer family. In the table below, the frequency of respondents' responses to the Consumer Characteristics variable will be described.

| Table 2. Frequency of consumer characteristics, 2018 |
|-----------------------------------------------|
| Consumer Characteristics | F | % |
|---------------------------|---|---|
| Gender | | |
| L | 35 | 36.5 |
| P | 61 | 63.5 |
| Marital Status | | |
| M | 64 | 66.7 |
| BM | 32 | 33.3 |
| Age | | |
| <40 | 36 | 37.5 |
| >40 | 60 | 62.5 |
| Last Education | | |
| SMA | 27 | 28.1 |
| D1-S3 | 1 | 1.0 |
| S1-S3 | 68 | 70.8 |
| Profession | | |
| P/M | 12 | 12.5 |
| PNS | 28 | 29.2 |
| PS | 25 | 26.0 |
| Wiraswasta | 6 | 6.2 |
| IRT | 10 | 10.4 |
| Pensiunan | 4 | 4.2 |
| Lainnya | 11 | 11.5 |
| Income | | |
| <2.500.000 | 23 | 24.0 |
| 2.500.001 - 4.500.000 | 25 | 26.0 |
| 4.500.001 - 6.500.000 | 37 | 38.5 |
| 6.500.001 - 8.500.000 | 5 | 5.2 |
| >8.500.000 | 6 | 6.2 |
| Number of Family Members (NFM) | | |
| 2 | 20 | 21 |
| 3 | 33 | 34.3 |
| >3 | 43 | 44.7 |
| NFM that do not consume brown rice | | |
| 1 | 59 | 61.4 |
| 2 | 32 | 33.3 |
| 3 | 4 | 4.2 |
| >3 | 1 | 1.1 |
| Reasons for Consuming Brown rice | | |
| For treatment | 21 | 21.9 |
| Maintain health | 58 | 60.4 |
| Diet program | 17 | 17.7 |
| Purchase Intensity | | |
| Ya | 61 | 63.5 |
| No | 35 | 36.5 |
| Frequency of Purchase | | |
| Every day | 3 | 3.1 |
One time a week 34 35.4
One time a month 28 29.2
Uncertain 31 32.3

Based on the description of the table above about the frequency of respondents' responses to the variable consumer characteristics shows that the gender of the dominant respondent is women. The dominant respondent's marital status is married. The age of the dominant respondent is over 40 years. The most recent education was dominant respondent S1 S1-S3. The education of dominant respondents is civil servants and private employees. The average dominant family income is 4.5 million - 6.5 million. The number of dominant respondent family members is above three people. Family members who consume brown rice are dominant, namely one member to 2 family members. The reason for consuming brown rice dominant respondents is the reason for maintaining health. The highest intensity of respondents' purchase is the routine answer, while the lowest answer is not routine buying brown rice. And the highest purchase frequency is brown rice selection once a week, and the lowest is buying every day.

3.2. Description of the frequency of environmental characteristics

Environmental Characteristics are environmental characteristics that can form positive consumer suggestions to carry out consumption activities in the environment. Environmental characteristics that are used as indicators of research assessment are where to buy brown rice, distance of the place/location of brown rice inventory, brown rice price offer, good service, reach of public transportation facilities, parking facilities, and brown rice attributes that are considered. In the table below, the frequency of respondents' responses to the Environmental Characteristics variable will be described.

Table 3. Frequency of environmental characteristics

| Environmental Characteristics | F | % |
|------------------------------|---|---|
| Place of Purchase            |   |   |
| - PT                         | 48 | 50 |
| - PM                         | 48 | 50 |
| The distance of Place of Purchase | | |
| - TS                         | 7  | 7.3 |
| - N                          | 45 | 46.9|
| - S                          | 44 | 45.8|
| Good Service                 |   |   |
| - TS                         | 6  | 6.2 |
| - N                          | 48 | 50 |
| - S                          | 42 | 43.8|
| Means of Public Transportation| | |
| - TS                         | 17 | 17.7|
| - N                          | 41 | 42.7|
| - S                          | 38 | 39.6|

Table 4. Brown rice attributes

| Quality of Brown rice  |   |   |
|------------------------|---|---|
| - TS                   | 4 | 4.2 |
| - N                    | 17| 17.7|
| - S                    | 75| 78.1|
| Origin of Brown rice   |   |   |
| - TS                   | 51| 53.1|
| - N                    | 35| 36.5|
| - S                    | 10| 10.4|
The aroma of Brown rice
- TS 37 38.6
- N 17 17.7
- S 42 43.7

Taste of Brown rice
- TS 20 20.8
- N 21 21.9
- S 55 57.3

Cleanliness of Brown rice
- TS 6 6.2
- N 13 13.5
- S 77 80.3

Brown rice Color
- TS 20 20.9
- N 18 18.7
- S 58 60.4

Based on the description of the table above about the respondent's response to the variable environmental characteristics shows that the frequency of valuation of the place of purchase is happening in traditional and modern markets. Distance to the place of purchase, good service, and public transportation facilities received a neutral appreciation by the majority of respondents. Brown rice quality, price offer, aroma, taste, cleanliness, and color of brown rice received positive appreciation by the majority of respondents. While the area of origin and parking facilities received a negative appreciation by the majority of respondents.

3.3. Description of the frequency of brown rice request volume
The volume of brown rice demand can be understood as the amount of consumer demand for brown rice at a certain time calculation. The indicator determines the Volume of brown rice demand is determined using an indicator of rice weight (kg). Considering the applicable price. Respondents' responses to the variable brown rice volume demand are illustrated in the table below:

| Purchase Volume | F  | %  |
|-----------------|----|----|
| 1-10 kg         | 88 | 91.7 |
| 11-20 kg        | 8  | 8.3 |

Based on the above table description, it can be seen that the highest frequency of rice demand volume ranges from 1-10 kg with a percentage of 91.7%. While the lowest volume of rice demand is in the range of 11-20 kg with a percentage of 8.3%. Thus it can be said that overall, respondents have a low interest in brown rice consumption.

3.4. Uji Chi-Square
Chi-Square Test is understood as a non-parametric test used to assess the relationship between variables (X and Y). Analysis to find out whether there is a relationship, the consideration used in the Chi-Square test is to make a comparison between $X^2$ Calculate with $X^2$ Table. If $X^2 > X^2$ Table, then there is a relationship between variables, Conversely, If $X^2 < X^2$ Table, then there is no relationship between variables.

To be able to do the Chi-Square test, the conditions are looking for Observation frequency (Fo) values and expected frequency values (Fh). In the research results above, the value of Fo and Fh has been described so that the Chi-Square test requirements are met.
Chi-Square value calculated in this study was obtained from the results of data calculations using SPSS 21.0. As described in the attached SPSS output, the relationship of Consumer Characteristics to the Volume of Brown rice Demand is illustrated in the following table 5.

Table 6. Comparison of chi-square calculate with chi-square table

| Consumer Characteristics | Chi-Square Tests (X²) | X² Table | Sig < 0.05 | Information          |
|--------------------------|-----------------------|----------|------------|----------------------|
| P3 (Gender)              | 2.865                 | 7.81     | 0.41       | There is no relationship |
| P4 (Marital Status)      | 1.759                 | 7.81     | 0.62       | There is no relationship |
| P5 (Age)                 | 6.723                 | 16.92    | 0.66       | There is no relationship |
| P6 (Educational level)   | 2.531                 | 12.59    | 0.86       | There is no relationship |
| P7 (Employment)          | 14.150                | 28.87    | 0.71       | There is no relationship |
| P8 (Revenue)             | 11,079                | 21.03    | 0.52       | There is no relationship |
| Q9 (Number of Family Members) | 1,787               | 12.59    | 0.93       | There is no relationship |
| P10 (Number of NFM consuming RR) | 62,128             | 16.92    | 0.00       | There is a relationship |
| P11 (Reasons for consuming RR) | 26,722              | 12.59    | 0.00       | There is a relationship |
| P12 (Purchase Intensity) | 36,088                | 7.81     | 0.00       | There is a relationship |
| P13 (Frequency of Purchase) | 56,555              | 16.92    | 0.00       | There is a relationship |

Based on the description in table 5, it can be seen that there is a significant relationship between the volume of demand for brown rice with four consumer characteristics, including: (P10, P11, P12, and P13) this is evidenced by the findings that X² Count > X² Table namely P10 = 62.128 > 16.92, P11 = 26.722 > 12.59, P12 = 36.088 > 7.81 and P13 = 56.555 > 16.92. And there is no relationship between the volume of demand for brown rice with seven characteristics of consumers. Among them: (P3, P4, P5, P6, P7, P8, and P9).

For the calculation of the correlation coefficient value of each statement shows that the four characteristics of consumers have the strength of a relationship that is strong enough and strong with the volume of demand.

Table 7. Strength of the relationship of consumer characteristics to the volume of brown rice demand

| Information                        | Correlation Coefficient Value | Interpretation |
|------------------------------------|-------------------------------|----------------|
| P3 (Gender)                        | 0.170                         | Very weak      |
| P4 (Marital Status)                | 0.134                         | Very weak      |
| P5 (Age)                           | 0.256                         | Very weak      |
| P6 (Educational level)             | 0.160                         | Weak           |
| P7 (Employment)                    | 0.358                         | Weak           |
| P8 (Revenue)                       | 0.322                         | Weak           |
| Q9 (Number of Family Members)      | 0.135                         | Very weak      |
| P10 (Number of NFM consuming RR)   | 0.627                         | Strong         |
| P11 (Reasons for consuming RR)     | 0.467                         | Strong enough  |
| P12 (Purchase Intensity)           | 0.523                         | Strong enough  |
| P13 (Frequency of Purchase)        | 0.609                         | Strong         |

Based on the attached SPSS output, the relationship of Environmental Characteristics to the Volume of Brown rice Demand is illustrated in the following table 7.

Table 8. Comparison of chi-square calculate with chi-square table environmental characteristics with volume demand for brown rice
Table 7. Chi-Square Tests for Environmental Characteristics

| Environmental Characteristics | Chi-Square Tests (X²) | X² Table | Sig < 0.05 | Information |
|-------------------------------|-----------------------|----------|------------|-------------|
| P15 (Where to Purchase)       | 11,016                | 7.81     | 0.01       | There is a relationship |
| P16 (Distance)                | 9,088                 | 21.03    | 0.69       | There is a relationship |
| P17 (Services)                | 6,031                 | 21.03    | 0.91       | There is no relationship |
| P18 (Coverage of Means of Transportation) | 13,728 | 16.92 | 0.13 | There is a relationship |
| P19a (Quality)                | 23,143                | 16.92    | 0.01       | There is a relationship |
| P19b (Origin Area)            | 8,939                 | 12.59    | 0.17       | There is no relationship |
| P19c (Aroma)                  | 18,508                | 21.03    | 0.10       | There is no relationship |
| P19d (Taste)                  | 2,238                 | 16.92    | 0.98       | There is no relationship |
| P19e (Cleanliness)            | 6,683                 | 16.92    | 0.67       | There is no relationship |
| P19f (Color)                  | 7,603                 | 16.92    | 0.57       | There is no relationship |

Based on table 7, it can be seen that two of the twelve indicators of environmental characteristics have a significant relationship between the volume of demand for brown rice in the city of Makassar. This means that H2 of this research, when viewed from twelve indicators, ten are not supported. This result is proven by the non-fulfillment of Chi-Square (X²) Calculate > Chi-Square (X²) Table value requirements.

For the calculation of the correlation coefficient value of the ten indicators shows that the results of the relationship of environmental characteristics with the volume of brown rice demand are very weak and weak. The results of the correlation coefficient values are illustrated in the following table 8.

Table 9. Strength of the relationship of consumer characteristics to the volume of brown rice demand

| Information                  | Correlation Coefficient Value | Interpretation |
|------------------------------|-------------------------------|----------------|
| P15 (Where to Purchase)      | 0.321                        | Weak           |
| P16 (Distance)               | 0.294                        | Weak           |
| P17 (Services)               | 0.243                        | Weak           |
| P18 (Coverage of Means of Transportation) | 0.354 |              | Weak           |
| P19a (Quality)               | 0.441                        | Strong enough  |
| P19b (Origin Area)           | 0.292                        | Weak           |
| P19c (Aroma)                 | 0.101                        | Very weak      |
| P19d (Taste)                 | 0.151                        | Very weak      |
| P19e (Cleanliness)           | 0.255                        | Weak           |
| P19f (Color)                 | 0.271                        | Weak           |

3.5. Relationship between consumer characteristics and brown rice demand volume

Based on the results of the study, it can be said that H1 is not fully supported and not fully unsupported. This is because the results of the chi-square test found four of the eleven characteristics of consumers have a relationship to the volume of demand for brown rice in Makassar City.

In theory, this result can be a known anomalous situation. Normatively the volume of demand will be directly proportional to the characteristics of consumers and environmental characteristics. The theory that can explain the relationship of environmental characteristics with the volume of brown rice demand is the theory of consumer behavior. According to the theory of consumer behavior, factors that can influence purchasing decisions, first, cultural factors consist of culture, sub-culture, and social class, both social factors consist of reference groups, family, roles, and status, the three personal factors consist of age, occupation, economic situation, personality, and lifestyle. In addition, (Kotler and Keller 2006) In addition to these factors, there are also six elements of concern and consideration.
Sof consumers in making purchasing decisions, namely product choices, brand choices, supplier choices, time of purchase, number of purchases, and payment methods (Kotler and Keller, 2006). In other words, the findings of this study provide at least a rejection of the theory of consumer behavior that has been used as a reference for purchasing decision assessments proposed by Kotler and Keller.

Based on the analysis of the relationship between consumer characteristics and volume of brown rice demand seen from gender, marital status, age, education level, occupation, income, number of family members. It can be seen that the factors that can be the cause of the results of the study are different from previous studies and can even say almost contrary to the theory of consumer behavior that the volume of demand for brown rice is low and tends to stagnate at magnitudes 1-10 occur once a week. These results can be seen as the low interest of consumers in brown rice.

Second, the brown rice consumer group is dominated by one consumer group. With a certain age level. The consumer group is married female consumers over the age of 40 years, earning 4,500,000 to 6,500,000, which predominantly work as civil servants. This result means that brown rice is only in demand by one consumer group. The demand for brown rice should be spread among all groups, as described in the description of four groups of consumers of brown rice, first men and old women get married, old men and women unmarried, young men and women married young, men young men and young women unmarried. But what happened was still dominated by groups of women aged over 40 years and already married.

It becomes homework for distributors to be able to introduce the use and benefits of brown rice in every age group, gender, status, education level, employment, income so that the benefits of brown rice can be felt evenly and can further drive up the volume of demand.

3.6. Relationship between environmental characteristics and volume of brown rice demand

Based on the results of the study, it can be said that the majority of H2 is supported. This is because the results of the chi-square test found that 2 of the ten indicators used to assess the relationship of environmental characteristics with the unsupported volume of brown rice demand. The two indicators include a place of purchase and quality of brown rice. While eight other indicators are not supported.

Based on the analysis of the relationship between environmental characteristics with the volume of demand for brown rice seen from the distance of place, service, ease of public transportation facilities, and attributes of brown rice. It can be seen that the factors that can be the cause so that the results of the study are different from previous studies and can even say almost contrary to the theory of consumer behavior used because the volume of demand for brown rice is low and stagnant at 1-10 kg occurs once a week. In addition, brown rice consumers do not spread evenly at every age, but are only dominated by married women and men consumers aged over 40 years apart from the low understanding of the benefits of brown rice in other age groups adding to the low demand for these results can be proven by studying the reasons for purchasing the old age group that is as a treatment. These results are then pushed so that the hypothesis is almost entirely unsupported.

4. Conclusion

Based on the description of the results and discussion of the study, it can be concluded that: 1) There is no relationship between consumer characteristics and volume of brown rice demand based on gender, status, age, education level, occupation. Income. And the number of family members. There is a relationship of consumer characteristics with the volume of demand for brown rice based on the amount of consumption of family members, reasons for consumption, the intensity of purchase, and frequency of purchases with an average strength of a strong enough relationship. 2) There is no relationship of environmental characteristics with the volume of demand for brown rice based on the distance of place, price offer, service, range of transportation facilities, parking facilities, taste, aroma, place of origin, and color of brown rice. There is a relationship between environmental characteristics and the volume of brown rice demand based on the place of purchase and the quality of brown rice. With a weak correlation coefficient, and quite strong.
References
[1] Arifin B 2005 *Pembangunan Pertanian: Paradigma Kebijakan dan Strategi Revitalisasi* (Grasindo)
[2] Sinaga S 2010 Potensi dan Pengembangan Objek Wisata Di Kabupaten Tapanuli Tengah
[3] Santika and Rozakurniati 2010 Teknik Evaluasi Mutu Beras Hitam dan Beras Merah pada Beberapa Galur Padi Gogo *Bul. Tek. Pertan.* 15 1–5
[4] Peter J P and Olson J C 1999 Perilaku konsumen dan strategi marketing edisi keempat (terjemahkan) *Jakarta: Erlangga*
[5] Badan Ketahanan Pangan 2015 *Pedoman Database Ketahanan Pangan* (Jakarta: Badan Ketahanan Pangan Kementrian Pertanian)
[6] Hasan M I 2002 Pokok-pokok materi metodologi penelitian dan aplikasinya *Jakarta Ghalia Indones.* 260
[7] Sugiyono 2010 *Metode Penelitian Kuantitatif dan Kualitatif dan R & D* (Bandung: Alfabeta)