Analysis of The Effect of Three-Month DCA Accuracy on Optimistic Bias In Fulfilling Cooking Oil For DCA Recipient Families

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KEYWORDS	ABSTRACT
Judgemental biases; direct cash assistance (DAC); cooking oil price	Cooking oil is one of the basic needs for the people of Indonesia and is included in the nine staples. Currently, there is an increase in the price of cooking oil as a result of the price of crude palm oil on the international market increasing and reaching the highest price ever recorded in history. So that the government's action to overcome the increase in cooking oil prices is to provide Direct Cash Assistance in the form of electronic money or non-cash assistance with the main target being Families Receiving Non-Cash Food Assistance and Family Hope Program and Street Vendors who sell fried food. This study aims to see the bias that occurs against DCA given to beneficiary families and provide suggestions for the government based on the results of cost accuracy in fulfilling cooking oil for 3 months. The method used in this research is the statistical test of single sample mean and double sample mean to determine the accuracy of respondents' answers to the movement of cooking oil prices. The results showed that there was an optimistic bias towards the estimation of cooking oil prices by the community. People expect the price of cooking oil to fall, but in actual conditions the price of cooking oil for a month from May to June shows a fixed price neither rising nor falling.

Introduction

Throughout 2021, CPO prices in the international market increased by 36.3% compared to 2020 and reached the highest price ever recorded in history at IDR 15,000/kg at the end of January 2022. The average global cooking oil price index in February 2022 increased by 8.5% compared to January 2022 and became the highest index in the last 10 years (Izzati et al., 2020). The increase in cooking oil price was caused by a surge in demand for cooking oil due to the economic recovery process after the second wave of the COVID-19 pandemic but was not followed by an increase in supply and production (Food and Agriculture Organization, 2022).

In response to the scarcity and price increase, the Government of Indonesia issued several policy instruments through the Minister of Trade Regulation No.6 of 2022, namely providing subsidies, Domestic Market Obligation (DMO), and Domestic Price Obligation (DPO) which requires CPO exporters to sell 20% of their export volume for domestic consumption at a price of IDR 9,300/kg as well as setting the highest retail price of IDR 11,500/liter for bulk cooking oil and IDR 14,000/liter for premium packaged cooking oil (Charissa, 2018).

Another effort made by the government to overcome the increase in cooking oil prices is to provide Direct Cash Assistance with the main target being 20.5 million families receiving Non-Cash Food Assistance and the Family Hope Program and 2.5 million street vendors who sell fried food (Druică et al., 2020). This aims to fulfill the cooking oil needs of the community because their livelihoods depand on one of the staples. The assistance is provided to meet the needs of cooking oil for three months, namely April, May, June 2022 with the mechanism of providing assistance given in advance in April 2022. The budget spent on this assistance is 6.4 trillion and is expected to be able to ease the burden on the community in the face of rising cooking oil prices (Ministry of Social Affairs, 2022).

The release of the policy and news will provide hope for poor families and street vendors so that they will form the perception that their cooking oil needs for three months will be met. The existence of conditions between expectations and reality can make a person's risk perception distorted by cognitive bias. Cognitive bias according to (Mohamed et al., 2021) is a systematic error in thinking that arises when a person processes and interprets information from the world around them so that it affects the decisions and judgements that will be made.

Therefore, a study is needed that focuses on the provision of direct cash assistance, especially to beneficiary families to determine the accuracy of the costs received as a fulfillment of cooking oil needs for three months with a cognitive ergonomics approach through cognitive biases that occur in the perception of beneficiary families (Sari, 2020). The bias that may occur is optimistic bias, which is a condition where expectations are better than reality so that the possibility of costs obtained by beneficiary families should be higher than those given by the government for cooking oil needs for three months (Nastiti et al., 2020).

From the judgemental bias that arises, there is one psychological factor that influences the giving of answers, namely anchoring. Anchoring is the tendency to compare and contrast limited things such as focusing on a value or number that will be compared with other numbers (Handoyo et al., 2019).

In the context of the Direct Cash Assistance program for cooking oil, anchoring bias could manifest when beneficiaries compare the amount of assistance received with their personal expectations or past experiences. For example, a family might anchor their perception on a higher-than-expected amount of assistance based on rising market prices for cooking oil, thus leading them to feel dissatisfied with the actual government-provided amount (Nasution, 2021). This mismatch between the anchored expectation and reality can result in the feeling that the assistance is insufficient, despite it being calculated based on average market prices and needs over a three-month period. Anchoring bias often influences how individuals assess the adequacy of a program, and in this case, it could affect the perception of whether the Direct Cash Assistance adequately meets their cooking oil needs (Pradhana, 2018).

Moreover, optimistic bias, as discussed earlier, can also play a significant role in shaping the perceptions of the beneficiaries. Optimistic bias occurs when individuals tend to believe that they are less likely to experience negative outcomes compared to others. In this scenario, families receiving the assistance may initially overestimate the benefits of the program, believing that the cash assistance will cover their cooking oil needs entirely for the three months (Rahmania et al., 2020). However, as the reality of rising prices and personal consumption patterns sets in, they may find that the assistance is insufficient. This leads to a gap between expectation and reality, potentially fostering disappointment or dissatisfaction among beneficiaries. Therefore, understanding how optimistic bias influences the perceptions of beneficiaries is crucial for evaluating the effectiveness of the Direct Cash Assistance program (Richie & Josephson, 2018).

In addition to anchoring and optimistic bias, another form of cognitive bias that could influence the perception of the Direct Cash Assistance program is the framing effect. The framing effect refers to the way information is presented or "framed," which can significantly influence decision-making and perception (Rosfadhila et al., 2011). If the government presents the program as a significant and sufficient intervention to address cooking oil price hikes, beneficiaries might perceive the assistance as more effective than it actually is, even if the financial aid does not fully meet their needs. Conversely, if the media or public discourse frames the assistance as inadequate or insufficient, beneficiaries may perceive the program as less effective, regardless of the actual amount received. Thus, the framing of the policy plays a vital role in shaping public perception and acceptance of the assistance program (Setyaningtyas, 2016).

To further investigate the effectiveness of the Direct Cash Assistance program, it is important to assess the actual consumption patterns and needs of the beneficiaries compared to the aid provided. The government has calculated the amount of assistance based on estimated needs for cooking oil, but individual family consumption can vary greatly depending on factors such as family size, lifestyle, and geographic location (Tarwaka, 2014). Some families may require more cooking oil than others due to their daily dietary habits or involvement in small food-related businesses. Therefore, it is essential to consider these variances when evaluating the program's success and when making any future adjustments to the amount of cash assistance provided. A thorough analysis of family needs versus actual assistance provided can help ensure that future policies are more aligned with the realities faced by beneficiaries (Utomo & Prabaswari, 2018).

Lastly, from a broader perspective, the psychological factors influencing beneficiaries' perceptions of the Direct Cash Assistance program can provide valuable insights into how government aid programs are received and interpreted by the public. Cognitive biases such as anchoring, optimistic bias, and framing effect highlight the importance of understanding not only the economic impact of such programs but also their psychological and social dimensions (Wiku et al., 2021). Addressing these cognitive biases in policy design and implementation can help improve the public's trust in government interventions and ensure that the intended benefits are fully realized. In conclusion, the cognitive ergonomics approach provides a useful framework for assessing the effectiveness of government aid programs, particularly in the context of volatile market conditions and fluctuating commodity prices like cooking oil (Yusup, 2018).

The urgency of this research stems from the ongoing volatility in the price of cooking oil, which has a direct impact on low-income families in Indonesia. Cooking oil, as a staple necessity, has seen unprecedented price hikes, partly due to global market

fluctuations in crude palm oil (CPO). The government's intervention through Direct Cash Assistance (DCA) aims to alleviate this burden for millions of families. However, there is a need to evaluate whether this assistance meets the actual needs of the recipients, especially when taking into account the cognitive biases that may distort their perception of the program's adequacy. Understanding these biases and how they affect beneficiaries' responses is crucial for refining future assistance programs to ensure more accurate targeting and greater effectiveness.

The novelty of this study lies in its focus on the cognitive biases—specifically optimistic bias, anchoring, and framing effects—affecting recipients' perceptions of government assistance programs. While previous studies have addressed the economic impacts of cash transfers, there is limited research that delves into how psychological factors influence the perceived adequacy of such interventions. This study contributes a unique cognitive ergonomics approach, highlighting how biases can skew the judgment of recipients regarding the sufficiency of government-provided aid, particularly in the context of cooking oil price stabilization efforts.

The research aims to uncover whether optimistic bias, along with other cognitive biases like anchoring, plays a significant role in shaping beneficiaries' perceptions of the Direct Cash Assistance program. By analyzing the cost accuracy in fulfilling cooking oil needs for three months, this study seeks to provide the government with actionable insights into how well the program meets its objectives. It also aims to offer recommendations for future improvements in the design and communication of similar aid programs, ensuring that recipients' expectations align more closely with the reality of what is provided.

The benefits of this research extend beyond the immediate context of cooking oil price control. By understanding the psychological factors influencing how recipients perceive and react to cash assistance, policymakers can improve the design of future social safety net programs. This research will assist in identifying areas where misperceptions occur and provide guidance on how to mitigate them, thus enhancing the effectiveness of government interventions. Additionally, it can help foster greater public trust in social programs, as well-informed adjustments can lead to better fulfillment of the needs of low-income families.

Research Methods

The subjects of this research are families receiving non-cash food assistance and family hope programs who receive three months of Direct Cash Assistance, namely April, May, June 2022 from the government to fulfill cooking oil in Lahat, South Sumatra. While the object of this research is the distribution of Direct Cash Assistance evenly and the accuracy of the right costs for the fulfillment of cooking oil for three months. The literature study comes from the official website https://sp2kp.kemendag.go.id/ to see the daily movement of cooking oil prices. Meanwhile, to find out the optimistic pessimistic bias of the community towards the price of cooking oil, a statistical test of the single sample mean and double sample mean was carried out.

The population in this study are all recipients of Direct Cash Assistance in Lahat, South Sumatra but it is not known exactly how many recipients of Direct Cash Assistance. The sampling technique used in this study uses the central limit theorem, which is when a random sample taken from an unknown population distribution will apply to small values of n, for example 4 or 5 if n>30, the the central limit theorem will almost always apply. So that the number of samples for this study were 35 respondents.

3. Research Flow

This research flow used in this study is as follows:

1) Research design

Some of the stages in the research design are decisive:

a. Independent variables: age, gender, and occupation
b. Dependant variable: optimistic bias or pessimistic bias toward cooking oil prices

2) Questionnaire creation

The questionnaire is used as a task for respondents to answer the questions given related to optimistic or pessimistic bias

3) Pilot study test

The pilot study was conducted to evaluate whether the questionnaire as a research instrument was in accordance with the objectives to be achieved in the study

4) Data collection

Data collection is carried out by the interview process and filling out a questionnaire to find out the answers of the respondents which will then be processed

5) Optimistic and pessimistic bias data collection

Data collection for the optimistic bias and pessimistic bias questionnaire is described as follows:

a. Cooking oil price movement data
b. The arrest of the cooking oil mafia
c. Data on cooking oil prices after Eid
d. Bulk cooking oil pilot project data

6) Optimistic and pessimistic bias analysis

In analyzing the optimistic possibility of bias occuring, the respondent's estimated cost data was subtracted from the actual cost data that occurred

7) Statistical analysis

a. Normality Test

When a random sample taken from a population is of unknown distribution, the central limit theorem can provide an approximation of the sample distribution. According to (Hines dan Montgomery, 2014) if we take a sample from a population of unknown probability, then the sample distribution of the sample mean will be approximately normal with mean and variance if the sample size is large. If the underlying distribution is symmetric and unimodal (not too far from normal), the central limit theorem will apply for small values n, e.g. 4 or 5. However, if the sample population is highly non-normal, a larger sample will be required. As a general guideline, if n>30, then the central limit theorem will almost always apply

b. Systhematic bias test

The systematic bias test uses a single sample mean test to determine whether there is bias occuring

c. Respondent accuracy t-test

The respondent's accuracy difference test was conducted using the multiple sample mean test to determine whether there was a difference in accuracy between two data groups

d. Calculating the quality of respondent accuracy
e. The quality of respondent's accuracy was calculated using a multiple sample mean test to identify which answers from the data groups were more accurate
f. Plotting the anchoring correlation graph

Correlation plotting is a graph used too see the pattern of the relationship between 2 variables. After that, the interpretation of the correlation that occurs between the two variables is carried out to find out how strong the relationship between the variables is and whether the relationship is positive or negative

8) Discussion analysis

This stage discusses the accuracy of respondents regarding optimistic bias and pessimistic bias in the provision of Direct Cash Assistance in 3 months

9) Conclusions and suggestions

In this stage, conclusions will be obtained based on the analysis that has been carried out to answer the objectives of this research and suggestions that can be given to further research.

Results and Discussions

1. Respondents

Data collection in this study was sourced from families included in the Non-Cash Food Assistance and Family Hope Program who received cooking oil Cash Assistance for three months, namely April, May, and June from the government in Lahat, South Sumatra. Some of the villages that received DCA were Talang Jawa Selatan, Bedeng Seng, Bedeng Sepuluh. There were criteria based on gender and age. In the gender criteria, there were 11 male respondents and 24 female respondents. Age criteria that received assistance in the age range of 20-30 years amounted to 3 people, 31-40 years old amounted to 6 people, 41-50 years old amounted to 14 people, 52-60 years old amounted to 11 people, and 61-70 years old amounted to 1 person

2. Optimistic Bias Analysis

To determine the possible bias, each cost estimation dataset was subtracted from the actual cost of cooking oil price data. The analysis was carried out by statistically testing each data set using a single sample mean hypothesis test. The following is a hypothesis for analyzing the bias that occurs in cooking oil prices.

H0: $\mu = 0$, indicating there is no systematic bias/error.

H1: $\mu \neq 0$, indicating there is a systematic bias/error

$\alpha = 0.05_{\text{two tailed}}$

The following table shows the results of testing a single sample mean for optimistic or pessimistic bias with 35 respondents (n), t table of 2.032 and p-value of 0.000

Table 1 Single Sample Mean Test Results

Variables	tcount	Conclusion	Interpretation
Price movement	-11,476	H1: $\mu \neq 0$, there is bias	tcount<ttable:optimistic bias
	-12,489	H1: $\mu \neq 0$, there is bias	tcount<ttable:optimistic bias
Mafia arrests	-12,175	H1: $\mu \neq 0$, there is bias	tcount<ttable:optimistic bias
	-12,420	H1: $\mu \neq 0$, there is bias	tcount<ttable:optimistic bias

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Variables	tcount	Conclusion	Interpretation
Price after Eid	-8,911	H1: μ≠0, there is bias	tcount<ttable:optimistic bias
	-8,863	H1: μ≠0, there is bias	tcount<ttable:optimistic bias
Bulk oil pilot project	-5,360	H1: μ≠0, there is bias	tcount<ttable:optimistic bias
	-5,794	H1: μ≠0, there is bias	tcount<ttable:optimistic bias

The accuracy table of cooking oil price data shows that the tcount value is in the rejection area of the ttable and the p-value <0.05 so as to reject H0. Statistically, it can be concluded that there is a systematic error/bias in the cooking oil price forecast data

3. Differences in Respondent Estimation Accuracy

A test of the difference in estimation accuracy between male and female respondents was conducted to determine whether there was a difference between the two types of respondents in estimating the price of cooking oil. The respondent accuracy difference test uses a multiple sample hypothesis test, namely the independent t test because the data sample is small. The hypothesis used in the independent t test is:

H0: μmale = μfemale → There is no difference in accuracy between the two data groups
H1: μmale ≠ μfemale → There is a difference in accuracy between two groups of data
α = 0.05$_{\text{two tailed}}$, t table = 2.032

Table 2 Accuracy Results Based on Gender

Variables	tcount	p-value	Conclusion
Daily movement of male x female prices	1,348	0,817	H0: μm=μf→There is no difference
	1,387	0,180	in the accuracy of two groups of data
	0,653	0,518	H0: μm=μf→There is no difference
	0,709	0,485	in the accuracy of two groups of data
Mafia arrests	-0,665	0,511	H0: μm=μf→There is no difference
	-0,672	0,509	in the accuracy of two groups of data
	0,192	0,849	H0: μm=μf→There is no difference
	0,211	0,835	in the accuracy of two groups of data
Price after Eid male x female	-1,500	0,142	H0: μm=μf→There is no difference
	-1,798	0,082	in the accuracy of two groups of data
	-1,412	0,167	H0: μm=μf→There is no difference
	-1,703	0,099	in the accuracy of two groups of data
Bulk oil pilot project	1,202	0,238	H0: μm=μf→There is no difference
	1,345	0,190	in the accuracy of two groups of data
	0,584	0,563	H0: μm=μf→There is no difference
	0,650	0,522	in the accuracy of two groups of data

Based on the above calculations, the tcount value on the accuracy variable is in the non-rejection area and the sig. p-value ≥ 0.05, meaning that it can accept H0. So statistically it can be concluded that there is no difference in the accuracy of respondents' estimates between male and female answers

In addition to testing the difference in accuracy based on gender, also testing the difference in accuracy based on occupation, namely traders and housewives. The hypothesis test used is:

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H0: μTrader = μHousewife → There is no difference in accuracy between the two data groups
H1: μTrader ≠ μHousewife → There is a difference in accuracy between the two data groups
α = 0.05 two$_{tailed}$

Table 3 Accuracy Results Based on Occupation

Variables	tcount	p-value	Conclusion
Daily movement of cooking oil price for trader x housewife	2,279	0,029	H1: μTrader ≠ μHW → There is a difference in accuracy between the two data groups
	2,255	0,032	
	1,373	0,179	H0: μTrader = μHW → There is no difference in accuracy between the two data groups
	1,357	0,186	
The arrests of cooking oil mafia trader x housewife	1,653	0,108	H0: μTrader = μHW → There is no difference in accuracy between the two data groups
	1,636	0,113	
	1,891	0,067	H0: μTrader = μHW → There is no difference in accuracy between the two data groups
	1,875	0,071	
Price after Eid trader x housewife	0,653	0,518	H0: μTrader = μHW → There is no difference in accuracy between the two data groups
	0,653	0,518	
	0,553	0,584	H0: μTrader = μHW → There is no difference in accuracy between the two data groups
	0,553	0,584	
Bulk oil pilot project trader x housewife	3,662	0,001	H1: μTrader ≠ μHW → There is a difference in accuracy between the two data groups
	3,682	0,001	
	2,806	0,008	H1: μTrader ≠ μHW → There is a difference in accuracy between the two data groups
	2,811	0,008	

Based on the above calculations, the t-count value on the daily movement variable of cooking oil Task 1B, the arrest of the cooking oil mafia in Task 2A and 2B, and the price of cooking oil after Eid in Task 3A and 3B are in the non-rejection area and the sig. p-value ≥ 0.05, meaning that it can accept H0. So statistically it can be concluded that there is no difference in the accuracy of respondents' estimates between male and female answers. Meanwhile, for the daily movement variable of cooking oil prices in Task 1A, the bulk cooking oil pilot project in Task 4A and Task 4B is in the rejection area and the sig. p-value < 0.05, meaning that it cannot accept H0. So statistically it can be concluded that there are differences in the accuracy of respondents' estimates between male and female answers

4. Respondent's Estimation Accuracy Quality

The quality of the estimation accuracy of male and female respondents was carried out with a multiple sample mean test to determine the best quality between the two with a total of 11 male respondents and 24 female respondents

Table 4 Quality Test Results Based on Gender

Variables	Average difference	Conclusion	Interpretation
Daily movement of male x female prices	-4781,8182 -6225,0000	$\left\| \mu_m < \mu_f \right\|$	Price estimates for male are more accurate than female
	-5690,9091 -6391,6667	$\left\| \mu_m < \mu_f \right\|$	Price estimates for male are more accurate than female
Mafia arrests male x female	-76000,000 -6766,6667	$\left\| \mu_m > \mu_f \right\|$	Price estimates for female are more accurate than male
	-6781,8182 -7016,6667	$\left\| \mu_m < \mu_f \right\|$	Price estimates for male are more accurate than female
Price after Eid male x female	-7145,4545 -5100,0000	$\left\| \mu_m > \mu_f \right\|$	Price estimates for female are more accurate than male
	-7145,4545 -5183,3333	$\left\| \mu_m > \mu_f \right\|$	Price estimates for female are more accurate than male
Bulk oil pilot project male x female	-1763,6364 -3025,0000	$\left\| \mu_m < \mu_f \right\|$	Price estimates for male are more accurate than female
	-2390,9091 -3008,3333	$\left\| \mu_m < \mu_f \right\|$	Price estimates for male are more accurate than female

Based on the table above, the absolute sign in the conclusion shows the distance between the average difference and zero. The average difference in estimated cooking oil prices based on the daily movement of cooking oil prices, news of the arrest of the cooking oil mafia in Task 2B and the bulk cooking oil pilot project of the female group is higher than that of the male group, so the male group is more accurate than the female group. Meanwhile, for variables based on the news of the arrest of the cooking oil mafia in Task 2A and the price of cooking oil after Eid, the male group is higher than the female group, so the price forecast of the female group is more accurate than the male group

In addition to testing the quality of accuracy based on gender, accuracy quality testing was also carried out based on occupation, namely traders as many as 17 respondents and housewives as many as 18 respondents

Table 5 Quality Test Results Based on Occupation

Variables	Average difference	Conclusion	Interpretation
Daily movement of trader x housewife	-4658,8235 -6822,2222	$\left\| \mu_T < \mu_{HW} \right\|$	Traders' price estimates are more accurate than housewife
	-5482,3529 -6822,2222	$\left\| \mu_T < \mu_{HW} \right\|$	Traders' price estimates are more accurate than housewife

Variables	Average difference	Conclusion	Interpretation
Mafia arrests trader x housewife	-6070,5882 -7933,3333	$\left\| \mu_T \right. <$ $\left. \mu_{HW} \right\|$	Traders' price estimates are more accurate than housewife
	-5894,1176 -7933,3333	$\left\| \mu_T \right. <$ $\left. \mu_{HW} \right\|$	Traders' price estimates are more accurate than housewife
Price after Eid trader x housewife	-5305,8824 -6155,5556	$\left\| \mu_T \right. <$ $\left. \mu_{HW} \right\|$	Traders' price estimates are more accurate than housewife
	-5423,5294 -6155,5556	$\left\| \mu_T \right. <$ $\left. \mu_{HW} \right\|$	Traders' price estimates are more accurate than housewife
Bulk oil pilot project trader x housewife	-1047,0588 -4122,2222	$\left\| \mu_T \right. <$ $\left. \mu_{HW} \right\|$	Traders' price estimates are more accurate than housewife
	-1535,2941 -4022,2222	$\left\| \mu_T \right. <$ $\left. \mu_{HW} \right\|$	Traders' price estimates are more accurate than housewife

Based on the table above, the absolute sign in the conclusion shows the distance of the average difference from zero. The average difference in estimated cooking oil prices on each variable of the trader group is more accurate than the housewife group

5. Anchoring

Correlation plotting is a graph used to see the relationship pattern between 2 variables, namely the anchoring variable and the estimation variable of the cost of cooking oil prices. After plotting the correlation, then the interpretation of the correlation that occurs between the two variables, how strong the relationship between variables is and whether the relationship is positive or negative
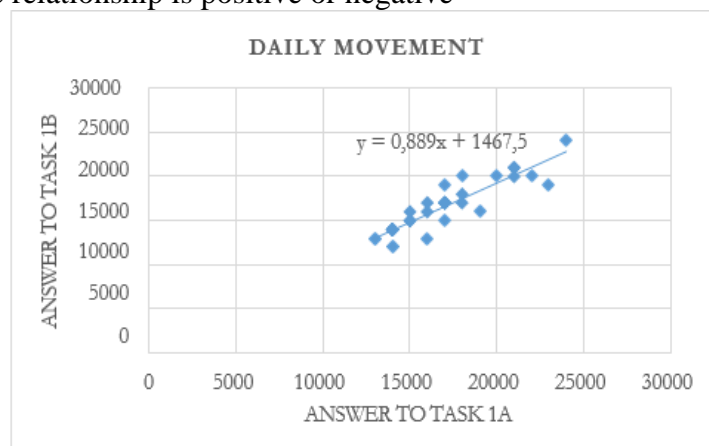

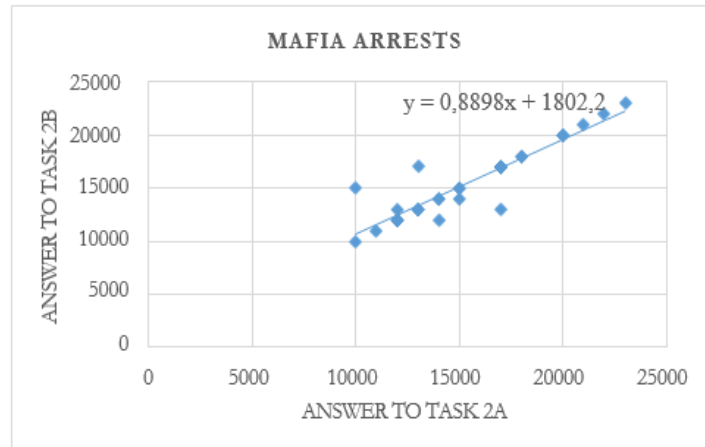**Figure 1 Anchoring Task 1 Graph**

Figure 2 Anchoring Task 2 Graph

Based on the graph, visually the correlation between the answers to Task 1A and
Task 1B shows a data distribution with a positive linear pattern as well as the plot graph
for the answers to Task 2A and Task 2B. So based on these two graphs, it is known that
between the answer variables in Task 1A and 1B as well as Task 2A and Task 2B visually
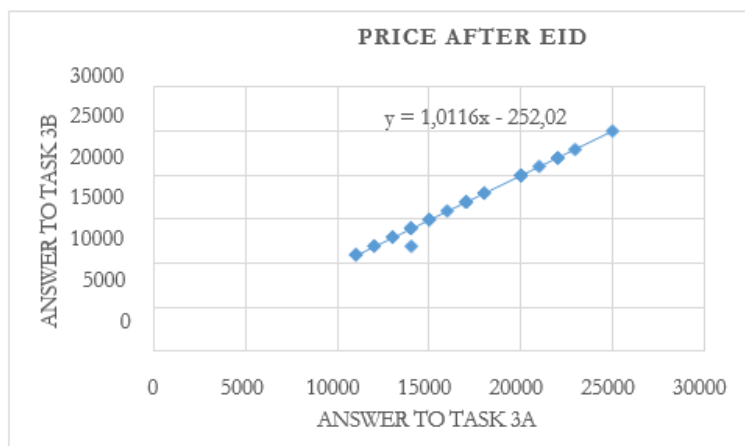show a positive correlation

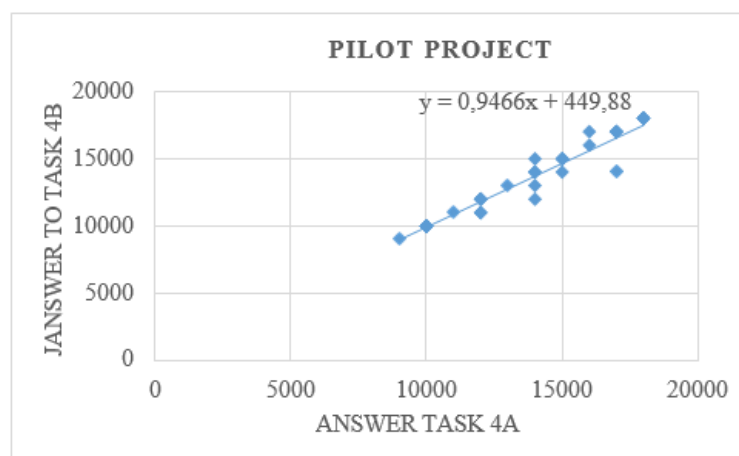

Figure 3 Anchoring Task 3 Graph

Figure 4 Anchoring Task 4 Graph

Based on the graph, visually the correlation between the answers to Task 3A and Task 3B shows a data distribution with a positive linear pattern as well as the graph plot for the answers to Task 4A and Task 4B. So based on these two graphs, it is known that between the answer variables in Task 3A and 3B as well as Task 4A and Task 4B visually show a positive correlation.

This occurs in accordance with the definition of anchoring, which is a bias that focuses on a value or number that will be compared with other numbers. Therefore, respondents' answers to Task B questions were inspired by the answers to questions in Task A.

So it can be concluded that the occurrence of optimistic bias is due to previous information about the daily movement of cooking oil prices and also the pattern of the tendency of cooking oil prices to increase due to certain factors such as approaching Eid al-Fitr.

Conclusion

There was optimistic bias in the four variables studied, namely the estimation of cooking oil prices based on daily movements in cooking oil prices, the arrest of the cooking oil mafia, the price of cooking oil after Eid, and the bulk cooking oil pilot project because the respondents' estimated costs tended to be smaller than the actual costs. Furthermore, there is no difference in estimation accuracy between male and female respondents and between respondents with jobs as traders and housewives. In addition, it is also known for the quality of accuracy of respondents based on gender that the estimated price of cooking oil based on the daily movement of cooking oil prices and the cooking oil pilot project of the male group is more accurate than the female group, for aspects based on the price of cooking oil after Eid is more accurate price estimates of the female group than the male group, then based on the occupation of the trader group is more accurate than the housewife group. Suggestions that can be given to the government should be with the soaring price increases able to provide subsidies for simple packaging cooking oil and bulk oil. Then for the selling price of cooking oil can consider between the Highest Retail Price and the Market Price.

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