

The Influence of Resource Persons and Communication Channels on Student Perception

Letario Prodeo

Universitas Esa Unggul, Indonesia

Email: elprodeobiz@gmail.com

*Correspondence

ABSTRACT

Keywords: credible speakers, communication channels, student perception.

This study aims to identify credible sources of information as well as communication channels used by Kalimantan students in receiving information about the palm oil industry for the 2023–2024 period. In addition, this study also describes the perception of Kalimantan students about the palm oil industry in Indonesia and analyzes the influence of resource persons and communication channels on this perception. This study uses a positivist paradigm with a descriptive and explanatory approach to analyze the data obtained through a questionnaire survey based on the Likert scale. The results of the study show that the credibility of the resource persons, especially researchers and academics, has a significant influence on student perception. Communication channels that support direct interaction, such as seminars or discussions, have proven to be more effective in forming a deeper perception of the palm oil industry. Theoretically, this research is expected to provide new insights into effective communication strategies, especially for issues related to the palm oil industry. Practically, the results of this study can be a reference for palm oil industry stakeholders in developing more relevant and effective communication strategies.



Introduction

The palm oil industry is one of Indonesia's strategic commodities. According to data collected by BPDPKS (Oil Palm Plantation Fund Management Agency), the palm oil industry generated a foreign exchange value of US\$31 billion in 2023, which is the highest amount ever generated by the national palm oil industry. In addition, the palm oil industry also contributes to creating jobs for 16.5 million people working in the palm oil industry from upstream to downstream (PASPI, 2024).

The palm oil industry also has an important role in the global market with the following facts. First, palm oil is a very productive crop in producing vegetable oil, with the potential to produce vegetable oil 8-10 times per hectare compared to other vegetable oil-producing crops such as soybeans and olives (Aboregela et al., 2023). Second, the palm oil industry also provides significant benefits in creating jobs, especially in major producing countries such as Indonesia and Malaysia. Third, palm oil has a very wide use and can be used in various products such as food products, industrial products, beauty products, and bioenergy, through the multifunctional benefits of palm oil, the palm oil industry has become a vital component in various sectors of the world economy. Fourth,

the palm oil industry has also encouraged advances in agricultural technology, including more efficient and sustainable plantation management practices. Finally, the palm oil industry provides vegetable oil for the world community.

In addition to high productivity, palm oil also has a competitive price compared to other vegetable oils in the international market. This makes the palm oil industry face global competition for vegetable oils, making it a threat to other vegetable oils. Competitive palm oil prices force other vegetable oil industries to use non-price competition strategies to bring down the image of the palm oil industry in the international market through the formation of issues that are massively and systematically disseminated.

The dissemination of negative issues against palm oil is carried out through international and national Non-Governmental Organization (NGO) networks and social media such as YouTube, Instagram, Twitter, and TikTok. In the last twenty years, international and national anti-palm oil NGOs have carried out various attacks on the palm oil industry through various propaganda campaigns to influence the perception of the global community, especially the younger generation, in seeing the palm oil industry as an environmentally unfriendly, unhealthy and inhumane industry (Salleh et al., 2021).

One of the accusations made against the palm oil industry is that the expansion of oil palm plantations has resulted in human rights violations against local communities in West Kalimantan, resulting in local communities losing access to agricultural land and facing increased poverty and food insecurity. The palm oil industry is also accused of not providing significant economic benefits in rural areas that develop oil palm plantations in Kalimantan, but rather causing unsustainability in the livelihoods of local villagers (Cardia et al., 2019). The palm oil industry is also often associated with the issue of deforestation that destroys tropical rainforests in Indonesia (PASPI, 2023), biodiversity loss (Austin et al., 2019), the cause of excessive greenhouse gas effects (PASPI, 2023) and other environmental issues.

From a health perspective, palm oil derivative products are also associated as a cause of cholesterol disease, cardiovascular, obesity, diabetes, lipid metabolism, inflammation, and oxidative stress (Ismail et al., 2018); (Odia et al., 2015).

PASPI (Palm Oil Agribusiness Strategic Policy Institute) in the fourth edition of the book *Myths of Palm Oil Industry Facts* found several main issues used in the anti-palm oil campaign including economic, social, health, and environmental issues. The issue of the palm oil economy, includes the contribution of palm oil to farmers' income, the contribution of palm oil to regional economic growth, the contribution of palm oil in food fulfillment, the contribution of palm oil to renewable energy materials, and the contribution of palm oil to Indonesia's foreign exchange contribution (PASPI, 2023: 25-60).

In the social issue of palm oil, the issues raised include, the contribution of palm oil in reducing unemployment in rural areas, the contribution of palm oil in poverty reduction in rural areas, the contribution of palm oil in the development of fasos and fasum in rural areas, the contribution of palm oil in the restoration of disadvantaged areas, and gender

discrimination between male and female employees in the palm oil industry (PASPI, 2023: 63-89).

In the issue of palm health, the issues raised include, palm oil is not a healthy and nutritious vegetable oil, palm oil makes food unpleasant and not crispy, palm oil is an oil that is cholesterol, palm oil contains low antioxidant compounds and does not diversify, and palm oil contains unbalanced saturated and unsaturated fatty acids (Plasek et al., 2021).

In environmental issues, the issues raised include, plantations are the main cause of global deforestation, Indonesia's deforestation is caused by the expansion of oil palm plantations, oil palm plantations are the main cause of forest and land fires, oil palm plantations are the main cause of floods or droughts, the movement without palm oil makes the global environment better, oil palm plants are water-consuming crops, oil palm plantations damage soil and water conservation, oil palm plantations destroy the degraded environment, oil palm plantations destroy Indonesia's biodiversity, oil palm plantations do not absorb carbon dioxide and reduce oxygen production, oil palm plantations on peatlands increase emissions, palm oil production produces higher emissions than other vegetable oils, palm biodiesel is not environmentally friendly compared to fossil diesel, palm oil industry emissions are higher than oil and gas industry emissions, and the palm oil industry is not a solution to global warming and global climate change (PASPI, 2023: 127-208).

The anti-palm oil campaigns carried out by the anti-palm oil NGO are widely accepted by the millennial generation and Z targeting the millennial and Z generations. This is because social media users are dominated by millennials (27 - 42 years old) and Generation Z (11 - 26 years old) of which the majority are scholars/students, in addition, generation Z spends an average of 3 hours and 42 minutes on social media every day (We are Social, 2024).

Seeing these conditions, palm oil industry stakeholders target students as targets for public education related to the social, economic, environmental, and health aspects of the palm oil industry. Various channels and sources of information are used by palm oil stakeholders to disseminate and educate the public about the social, economic, environmental, and health aspects of the palm oil industry. How the sources, channels, and content of messages conveyed by palm oil stakeholders so far to students have affected students' perception of the palm oil industry is interesting to research.

This study aims to identify credible sources of information in the assessment of Kalimantan students in receiving information about the palm oil industry for the 2023–2024 period, as well as the communication channels used by Kalimantan students to receive this information. In addition, this study aims to describe the perception of Kalimantan students about the palm oil industry in Indonesia, as well as analyze the influence of resource persons and communication channels on student perceptions.

The benefits of this research are divided into two, namely theoretical and practical benefits. Theoretically, this research is expected to provide new insights into effective communication strategies to solve various issues, especially in the palm oil industry.

Practically, the results of this study can be a reference for palm oil industry stakeholders in developing effective and relevant communication strategies.

Method

This research uses the positivism paradigm, which emphasizes objectivity and measurement to understand social realities, such as students' perceptions of the palm oil industry in Indonesia. This paradigm allows measurable data collection through questionnaire surveys to analyze the influence of resource persons and communication channels on student perceptions. In this study, descriptive and explanatory approaches are used to describe phenomena and explain the relationships between variables using hypotheses.

This study uses a survey method, which aims to measure the influence of resource persons and communication channels on student perceptions. Data was collected through a Likert scale-based questionnaire, with a value of 1–5 to represent the level of consent of respondents. The variables measured included independent variables (resource persons and communication channels) and dependent variables (student perception). The data sources of this research consist of primary data obtained through digital questionnaires and field visits, as well as secondary data that includes analysis of scientific journals and related literature.

The research population was students at three universities in Kalimantan, which was chosen because of the relevance of the location to palm oil issues. The sample was determined using the purposive sampling method, with a total of 240 respondents who met certain criteria. Testing the validity and reliability of the questionnaire was carried out using SPSS, ensuring that the measuring tool produced valid and reliable data. The results of the analysis were used to test the hypothesis through partial test (t-test) and simultaneous test (F-test) to assess the influence of independent variables on dependent variables.

This research is expected to contribute to understanding the effectiveness of resource persons and communication channels in shaping student perceptions related to the palm oil industry, providing insight for policymakers in designing more effective communication strategies.

Results and Discussion

Hypothesis Test Results

This study has two hypotheses, namely resource persons (message sources) have a significant influence on students' perception of the palm oil industry, and message channels (media) have a significant influence on students' perception of the palm oil industry.

Results of the Variable Hypothesis Test of Resource Persons (X₁)

Based on Table 1, two tests can be carried out, namely first, conventionally it is found that at the error level = 0.05 (double-sided test) with $df = 237$ ($240-3$) it is known that $t_{table} = 1.651$ and $t_{count} = 6.043$. Because $t_{count} > t_{table}$, the resource person

variable (X_1) has a significant effect on students' perception of receiving information on the palm oil industry. This means that H_0 is rejected and H_1 is accepted. Second, according to SPSS, by looking at the probability of its significance (p-value) = 0.000 or 0% less than 5%, then H_0 is rejected, H_1 is accepted so that it can be said that the resource person variable (X_1) has a significant effect on the perception of students in receiving palm oil industry information, thus the hypothesis proposed is proven.

Results of the Communication Channel Variable Hypothesis Test (X_2)

Based on Table 2, two tests can be carried out, namely first, Conventionally it is found that at the error level = 0.05 (double-sided test) with $df = 237$ (240-3) it is known that $t_{table} = 1.651$ and $t_{count} = 2.582$. Because $t_{count} > t_{table}$, the communication channel variable (X_2) has a significant effect on students' perception of receiving palm oil industry information. This means that H_0 is rejected and H_1 is accepted. Second, in terms of SPSS, by looking at the probability of its significance (p-value) = 0.010 or 1% less than 5%, then H_0 is rejected, H_1 is accepted so that it can be said that the communication channel variable (X_2) has a significant effect on students' perception in receiving palm oil industry information, thus the hypothesis proposed is proven.

Research Answer

In this study, three problem formulations are answered, namely as follows:

- 1) What resource persons are considered credible by students of the Universities of Palangkaraya, Tanjungpura, and Mulawarman in receiving palm oil information in the 2023 - 2024 period?
- 2) What communication channels are used by students of the Universities of Palangkaraya, Tanjungpura, and Mulawarman in receiving palm oil information in the 2023 - 2024 period?
- 3) What is the perception of students of the Universities of Palangkaraya, Tanjungpura, and Mulawarman towards the palm oil industry in Indonesia?

Based on the results of the research carried out, the following results were found:

- 1) Resource persons who are considered credible by students of the Universities of Palangkaraya, Tanjungpura, and Mulawarman in receiving palm oil information in the 2023-2024 period are researchers/academics.
- 2) The communication channel used by students of the Universities of Palangkaraya, Tanjungpura, and Mulawarman in receiving palm oil information in the 2023-2024 period is a seminar/discussion forum.
- 3) The perception of students of the Universities of Palangkaraya, Tanjungpura, and Mulawarman towards the palm oil industry in Indonesia is positive in looking at the economic aspects of palm oil, but negative in looking at the environmental aspects of palm oil.

In this chapter, the author will describe how the Elaborate Likelihood Model theory, effective communication, and source credibility theory can complement each other to create more meaningful and impactful interactions. Effective communication is the

foundation of delivering a clear and understood message, whereas the Lasswell Paradigm model is an effective communication formula to analyze each element (source, communication channel, message recipient, effect of message, or perception). The source, as the sender of the message, must have high credibility so that the message can be received and trusted by the recipient. The credibility of a source is determined not only by knowledge and expertise but also by the trust and reliability felt by the recipient of the message.

Selected Resource Persons for Kalimantan Students in Receiving Information on the Palm Oil Industry in the 2023-2024 Period

The results of the study show that researchers or academics are the most recognized resource persons by students of Tanjungpura University, Palangkaraya University, and Mulawarman University in conveying information about the palm oil industry. The data obtained showed that researchers/academics were the main source of information with a percentage of 22.17% at Tanjungpura University, 22.02% at Palangkaraya University, and 22.56% at Mulawarman University. This consistency indicates that researchers or academics are the preferred resource persons of Kalimantan students because of the authority and competence of these resource persons in the palm oil industry. In contrast, other resource persons such as business actors, NGOs, governments, and community leaders have a lower percentage, with business actors ranked second after researchers/academics.

Table 1
Comparison of Inter-University Student Resource Persons (% of respondents) (n=240)

Sources	Tanjungpura University	University of Palangkaraya	Mulawarman University	Average University
Government	18,80%	18,72%	17,58%	18,37%
Researcher/Academician	22,17%	22,02%	22,56%	22,25%
Non-Governmental Organizations (NGOs)	19,61%	19,68%	19,65%	19,65%
Business Actors (Companies and Farmers)	21,63%	21,54%	22,21%	21,80%
Community Figurest	17,79%	18,03%	17,99%	17,94%

Source: Primary data processed

The results of this study confirm the importance of the credibility of sources in influencing the receipt of information, by the Source Credibility Theory proposed by Hovland, Janis, and Kelley (1953). This theory states that communicators with high credibility, such as researchers or academics, are more effective in influencing the perception of message recipients. The credibility possessed by researchers or academics,

which includes expertise and trust, plays an important role in shaping students' perception of palm oil industry information. In addition, this theory also emphasizes the importance of attraction and trust in information sources. Researchers or academics are often considered more attractive and trustworthy than business actors or community leaders who may be considered to have personal interests or biases (Hadi et al., 2021). Previous research supports these findings, stating that the public tends to trust the information presented by researchers or academics because they are considered to have a deep understanding and extensive experience in the field (Reif et al., 2020). Ineffective communication, the credibility of the source affects the extent to which the message is received and properly understood by the recipient, with the researcher or academics providing more accurate and relevant information.

Communication Channels of Choice for Kalimantan Students in Receiving Information on the Palm Oil Industry in the 2023-2024 Period

The results of the study show that seminar or discussion forums are the most widely used communication channels by students from Tanjungpura University, Palangkaraya University, and Mulawarman University to receive information about the palm oil industry, with an average percentage of 21.26%. Seminars or discussion forums are the preferred communication channel for Kalimantan students compared to other communication channels such as scientific journals or books, social media, websites, and TV & Radio programs. The selection of communication channels for seminar or discussion forums as the communication channels of students' choice, can be aligned based on the perspective of the Elaboration Likelihood Model (ELM) developed by Petty and Cacioppo.

Table 2
Comparison of Inter-University Student Communication Channels (% of respondents)
(n=240)

Sources	Tanjungpura University	University of Palangkaraya	Mulawarman University	Average University
Social Media	20,65%	21,49%	20,60%	20,91%
Website	20,19%	20,00%	20,21%	20,13%
TV & Radio Programs	16,71%	16,57%	16,54%	16,60%
Scientific Journal or Book	21,10%	21,04%	21,13%	21,09%
Seminar/Discussion Forum	21,35%	20,91%	21,52%	21,26%

Source: Primary data processed

The Elaboration Likelihood Model (ELM) theory, developed by Petty and Cacioppo in 1986, describes two main routes in information processing, namely the central route and the peripheral route, which affect how persuasive messages can change a person's attitude and behavior (Yang, 2018). Central routes are used by message recipients who have the motivation, opportunity, and ability to process information in depth and

critically. In contrast, peripheral routes are used by message recipients who lack these three capabilities, so messages are received in a simpler and faster way. In the context of this research, seminar or discussion forums tend to facilitate information processing through a central route, because they provide a space for direct interaction that allows students to be actively involved in communication, discuss, ask questions, and get clarifications from other speakers or participants. This improves the processing of information in depth. Previous research has also emphasized that seminars or discussion forums are effective communication channels for changing attitudes, by improving students' critical thinking and interpersonal communication skills (Harrison et al., 2023).

Student Perception of Palm Oil Industry Information

The results of the study show that the perception of Kalimantan students towards the palm oil industry varies greatly depending on the aspects reviewed, namely economic, social, health, and environment. Overall, the economic perception of the palm oil industry occupies the highest position in the three universities studied, namely Tanjungpura University, Palangkaraya University, and Mulawarman University, with an average perception score of 4.13. On the other hand, the perception of the environmental impact of the palm oil industry is at the lowest position with an average score of 3.53.

Table 3
Student Perception Competition Between Universities

Perception	Tanjungpura University	University of Palangkaraya	Mulawarman University	Average University
Economics	4,16	4,10	4,14	4,13
Social	3,91	3,87	3,80	3,86
Health	3,86	3,75	3,74	3,79
Milieu	3,59	3,50	3,49	3,53
Average	3,88	3,81	3,79	3,83

Source: Primary data processed

Students' positive assessment of the economic aspects of the palm oil industry is in line with the view that this industry contributes significantly to economic growth in palm oil-producing areas, as shown by Kasryno (2015), who found that provinces with large oil palm plantations, such as West Kalimantan, Central Kalimantan, and East Kalimantan, have higher economic growth. This indicates that areas with established oil palm plantations have experienced an increase in GDP. However, this positive perception is not uniform throughout Indonesia. Research by (Syahza, 2019) shows that in areas such as Darul Makmur District, Aceh, the palm oil industry does not have a significant economic impact, indicating that the economic benefits of palm oil may vary depending on the phase of plantation development, infrastructure, and local policies. The perception of Kalimantan students who tend to be positive towards the economic aspect is likely influenced by their direct experience in areas that depend on the palm oil industry. From the perspective of effective communication, this positive perception can be attributed to

the success of delivering messages about the economic benefits of palm oil through the right channels and credible sources, such as seminars or discussions with academics or industry players.

Multiple Regression Analysis

Multiple regression analysis in this study was used to analyze the influence between resource persons and communication channels on students' perceptions of palm oil industry information. The influence of resource persons (X1) and communication channels (X2) on student perception (Y) is demonstrated in the form of mathematical equations:

$$Y = 1,904 + 0,352\chi_1 + 0.149\chi_2$$

Adjusted R² : 0.216

Table 4
Regression Estimation Output Results

Variable	Coefficient Estimation	Beta	t	Sig	Information
Intercept	1,904		7,900	0,000	Significant Influence
Resource Persons (X ₁)	0,352	0,377	6,043	0,000	Significant Influence
Communication Channels (X ₂)	0,149	0,161	2,582	0,010	Significant Influence
F Calculate	32,620			0.000	Significant Influence
R ²	0,216				
Adjusted R ²	0,209				

Source: Primary data processed

Based on the regression equation, it can be explained that the regression constant value of 1.904 shows the perception of students of Tanjungpura, Palangkaraya, and Mulawarman University of 1.904 on the Likert scale when the variables of resource persons (X1) and communication channels (X2) are constant. The resource person variable (X1) has a significance value of 0.000, which means it has a significant effect on student perception, while the communication channel (X2) also has a significant effect with a significance value of 0.010. The regression coefficient for X1 of 0.352 shows that the more credible the resource person, the higher the perception of students, while the coefficient of X2 of 0.149 shows that effective communication channels also have a positive effect on student perception. The t-test and hypothesis testing showed that the variables of resource persons (X1) and communication channels (X2) had a significant effect on students' perceptions of receiving information about the palm oil industry. Based on the output results of SPSS, the calculated t-value for the resource person was 6.043, greater than the t-table 1.651, with a p-value of 0.000, which showed a significant influence. Likewise, for communication channels, the t-calculated value is 2.582, greater than the t-table 1.651, with a p-value of 0.010, which also shows a significant influence.

With a significance of 5% (two-sided test), these two variables were proven to have a significant effect on student perception.

Conclusion

Based on the analysis of the perception of students of the Universities of Palangkaraya, Tanjungpura, and Mulawarman towards palm oil industry information for the 2023–2024 period, this study found several conclusions. The majority of respondents are women, with the largest proportion at the University of Palangkaraya (67.50%). Researchers and academics are considered the most credible sources because of their expertise and objectivity, supporting the theory of Source Credibility. Communication channels also have a significant effect, with seminar and discussion forums being the most effective channels, encouraging students to process information in depth through the central route in the Elaboration Likelihood Model (ELM), resulting in a more stable perception. Students' perception of the palm oil industry is mostly positive in the economic aspect and negative in the environmental aspect. Therefore, resource persons with high reputations need to be involved in the dissemination of information, while discussion forums should be designed more interactive to increase student participation. The evaluation of educational programs and campaigns on environmental sustainability needs to be strengthened, involving NGOs and field activities.

Bibliography

- Aboregela, A. M., Sonpol, H. M. A., Metwally, A. S., El-Ashkar, A. M., Hashish, A. A., Mohammed, O. A., Elnahriry, T. A., Senbel, A., & Alghamdi, M. (2023). Medical students' perception and academic performance after team-based and seminar-based learning in human anatomy. *Journal of Taibah University Medical Sciences*, 18(1), 65–73.
- Austin, K. G., Schwantes, A., Gu, Y., & Kasibhatla, P. S. (2019). What causes deforestation in Indonesia? *Environmental Research Letters*, 14(2), 24007.
- Cardia, D. I. N. R., Santika, I. W., & Respati, N. N. R. (2019). *Pengaruh kualitas produk, harga, dan promosi terhadap loyalitas pelanggan*. Udayana University.
- Hadi, H., Fatimatasari, F., Irwanti, W., Kusuma, C., Alfiana, R. D., Asshiddiqi, M. I. N., Nugroho, S., Lewis, E. C., & Gittelsohn, J. (2021). Exclusive breastfeeding protects young children from stunting in a low-income population: a study from Eastern Indonesia. *Nutrients*, 13(12), 4264.
- Harrison, L. B., Bergeron, G., Cadieux, G., Charest, H., Fafard, J., Levade, I., Blais, A. C., Huchet, E., Trottier, B., & Vlad, D. (2023). Monkeypox in Montréal: epidemiology, phylogenomics, and public health response to a large North American outbreak. *Annals of Internal Medicine*, 176(1), 67–76.
- Ismail, S. R., Maarof, S. K., Siedar Ali, S., & Ali, A. (2018). Systematic review of palm oil consumption and the risk of cardiovascular disease. *PLoS One*, 13(2), e0193533.
- Odia, O. J., Ofori, S., & Maduka, O. (2015). Palm oil and the heart: a review. *World Journal of Cardiology*, 7(3), 144.
- Plasek, B., Lakner, Z., Badak-Kerti, K., Kovacs, A., & Temesi, A. (2021). Perceived consequences: General or specific? the case of palm oil-free products. *Sustainability*, 13(6), 3550.
- Reif, A., Kneisel, T., Schäfer, M., & Taddicken, M. (2020). Why are scientific experts perceived as trustworthy? Emotional assessment within TV and YouTube videos. *Media and Communication*, 8(1), 191–205.
- Salleh, K. M., Zakaria, K., Mazlan, R., Abd Rahman, M. A. K., & Nambiappan, B. (2021). The Impact of Negative Perceptions Towards Palm Oil in the European Union on the Competitiveness of Malaysian Palm Oil Exports. *Oil Palm Industry Economic Journal*, 21(1), 28–41.
- Syahza, A. (2019). The potential of environmental impact as a result of the development of palm oil plantation. *Management of Environmental Quality: An International Journal*, 30(5), 1072–1094.
- Yang, D. J. (2018). Exploring the communication effects of message framing of smoking

cessation advertising on smokers' mental processes. *International Review on Public and Nonprofit Marketing*, 15(3), 315–332.