Scientechno: Journal of Science and Technology, 3(1) April 2024



## Revisiting Neoliberalism in Indonesian Minimarket Marketing Strategies and Financial Reporting: How Do They Perform?

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#### **Article Information:**

Received 10 March 2024 Revised 15 March 2024 Accepted 20 March 2024

#### **ABSTRACT**

This study analyzes the impact of neoliberalism in minimarket marketing strategies on financial reporting and financial performance in Indonesia, focusing on the case studies of Indomaret and Alfamart. Neoliberalism, with its emphasis on market liberalization and deregulation, has influenced the business model and marketing strategy of minimarkets. This study uses a qualitative approach with descriptive analysis. Data was obtained through in-depth interviews, literature studies, and analysis of financial statements. The results of the study show that marketing strategies influenced by neoliberalism have a significant impact on financial reporting and financial performance of the two minimarkets.

**Keywords**: advertising, alfamart, indomaret, minimarket, neoliberalism

Journal Homepage <a href="https://journal.ypidathu.or.id/index.php/Scientechno">https://journal.ypidathu.or.id/index.php/Scientechno</a>

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How to cite: Destiana, R., Rawi, Rami., & Muthiarsih, T. (2024). Revisiting Neoliberalism in

Indonesian Minimarket Marketing Strategies and Financial Reporting: How Do They

Perform? Scientechno: Journal of Science and Technology,

Published by: Yayasan Pendidikan Islam Daarut Thufulah

#### INTRODUCTION

Neoliberalism has been one of the most influential economic paradigms since the late 20th century. With its emphasis on free markets, deregulation, and privatization, neoliberalism aims to improve economic efficiency and growth through reducing the role of government in the economy and increasing the role of the private sector (Creswell & Poth, 2018; Ferlay dkk., 2021; Richards dkk., 2024). In Indonesia, neoliberal policies have been adopted significantly since the reform era, affecting various sectors of the economy, including the retail sector.

Minimarkets such as Indomaret and Alfamart are prominent examples of how neoliberalism principles can be applied in the context of the Indonesian economy. Both companies have grown rapidly, with thousands of branches spread across the country. Aggressive and innovative marketing strategies have been one of the keys to their

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success (Lee dkk., 2020; Liang dkk., 2020). However, how these strategies affect their financial reporting and financial performance still needs further research.

This research focuses on the impact of neoliberalism on minimarket marketing strategies and how this affects financial reporting and financial performance (Finn dkk., 2020; Grasselli dkk., 2020). The case studies of Indomaret and Alfamart were chosen because these two companies are major players in the Indonesian retail industry and have shown significant growth in recent decades. This research will explore:

- 1. How do neoliberalism principles affect the marketing strategies of Indomaret and Alfamart?
- 2. What is the impact of the marketing strategies influenced by neoliberalism on the financial reporting of the two companies?
- 3. How does the marketing strategy influenced by neoliberalism affect the financial performance of Indomaret and Alfamart?

The main objective of this study is to identify and analyze the impact of neoliberalism on marketing strategies and their implications for the reporting and financial performance of Indomaret and Alfamart. Specific objectives include:

- 1. Understand the application of neoliberalism principles in minimarket marketing strategies.
- 2. Assess the impact of marketing strategies on the company's financial reporting.
- 3. Evaluate the influence of marketing strategies on the company's financial performance.

While there are many studies that explore the impact of neoliberalism on various sectors of the economy, there are still limited specific studies examining its impact on marketing strategies and financial reporting in the context of minimarkets in Indonesia. Several previous studies have discussed how neoliberalism encourages operational efficiency and innovation in marketing strategies (Finn dkk., 2020; Shi dkk., 2020). However, few specifically examine how these changes are reflected in the financial reporting and financial performance of retail companies, especially convenience stores such as Indomaret and Alfamart.

For example, research by Harvey (2005) emphasizes the general impact of neoliberalism on the global economy, but does not specifically examine its implications for the retail sector in Indonesia (Chen & Lin, 2019; Dong dkk., 2020; Karras dkk., 2019). Likewise, a study by Stiglitz (2010) focuses more on the macroeconomic impact of neoliberal policies without touching on specific aspects of marketing strategies and financial reporting in the context of minimarkets.

This study seeks to fill this gap by providing an in-depth analysis of how neoliberalism principles are applied in Indomaret and Alfamart's marketing strategies and their impact on financial reporting and financial performance (Tang dkk., 2020; Van Doremalen dkk., 2020; Varadi dkk., 2022). Thus, this research will not only enrich the literature on neoliberalism and marketing strategies but also provide practical insights for retail companies in Indonesia.

This research is expected to make theoretical and practical contributions. Theoretically, this research will enrich the literature on the relationship between neoliberalism, marketing strategies, financial reporting, and financial performance. In practical terms, the results of this study can provide insights for convenience store managers and policymakers on how effective marketing strategies can improve financial performance and financial reporting.

The significance of this research lies in a deeper understanding of how the principles of neoliberalism can be applied in marketing strategies and their impact on the financial aspects of companies. With a focus on the two major players in the Indonesian retail industry, the results of this study can provide a comprehensive picture of the dynamics occurring in the sector and provide practical recommendations for improving financial performance through innovative and efficient marketing strategies.

As such, the research is not only relevant for academics interested in the study of neoliberalism and retail economics (Cao dkk., 2020; Gordon dkk., 2020; Wang dkk., 2020), but also for business practitioners seeking to improve their companies' performance in an increasingly competitive market.

#### **Literature Review**

The literature on neoliberalism suggests that this concept supports reducing the role of government in the economy and increasing the role of the private sector (Wu & McGoogan, 2020; Zhu dkk., 2020). In the context of marketing, neoliberalism encourages tighter competition and continuous innovation (Chan, 2022; Qiu dkk., 2020; Zhuang dkk., 2021). Previous studies have shown that neoliberalism can improve operational efficiency and financial performance of companies. However, its impact on financial reporting can vary depending on the economic context and local regulations.

## Open Systems Theory in the Context of Neoliberalism and Minimarket Marketing

This theory aims to explain how neoliberalism affects minimarket marketing strategies and their impact on financial reporting and financial performance. Using Open Systems Theory, we can understand the interaction between the external environment (neoliberalism policies) and the company's internal systems (marketing strategy, financial reporting, and financial performance).

The Open Systems Theory, developed by Ludwig von Bertalanffy, assumes that an organization is a system that interacts with its environment. In this context, the company does not stand alone but is constantly influenced by and influences its external environment. The main elements of Open Systems Theory include input, throughput, output, feedback, and environment.

- 1. Inputs: Inputs in this system include neoliberal policies and principles such as deregulation, privatization, and market liberalization. These factors create the environment in which the minimarket operates.
- 2. Throughput (Internal Process): Internal processes in convenience stores include marketing strategies influenced by neoliberalism. These include:
  - a) Aggressive Expansion: Opening of new branches to reach a wider market.
  - b) Technological Innovation: The use of information technology in supply chain management and digital marketing.
  - c) Intensive Promotion: An aggressive promotional strategy to attract and retain customers.
- 3. Output: The output in this context is the result of the minimarket's marketing and operational strategy, which is reflected in financial reporting and financial performance. These outputs include:
  - a) Increased Revenue and Profit: As a result of operational efficiency and effective marketing strategies.

- b) Financial Reporting Transparency: More accurate and transparent financial reporting in response to market and regulatory demands.
- 4. Feedback: Feedback is the process by which the results of the output are evaluated and used to make adjustments in internal processes. In this case, the minimarket evaluates their financial performance and financial statements to identify areas that need further improvement and innovation.
- 5. Environment: The environment includes external factors such as competition, economic conditions, and policy changes. The competitive environment forces minimarkets to continue to innovate and adapt to market changes.

## **Neoliberalism and the Global Economy**

Neoliberalism, which includes deregulation, privatization, and market liberalization, has been the dominant paradigm in the global economy since the late 20th century. The principles of neoliberalism emphasize the reduction of the role of government in the economy and the increasing role of the private sector to achieve economic efficiency and growth ("A Boost for Personalised Medicine," 2015; Harvey, 2011; Wu dkk., 2021). This policy has been implemented in many countries, including Indonesia, which has undergone significant changes in its economic structure since the reform era.

## The Impact of Neoliberalism on the Retail Sector

Research by Kotler and Keller (2012) shows that neoliberalism can encourage tighter competition and sustainable innovation in the retail sector. Deregulation and market liberalization allow retail companies to operate more freely, improve operational efficiency, and expand their distribution networks. In Indonesia, minimarkets such as Indomaret and Alfamart have taken advantage of neoliberal policies to carry out aggressive expansion and increase their market penetration.

## **Minimarket Marketing Strategy**

The marketing strategies implemented by convenience stores under the influence of neoliberalism include several key aspects:

- 1. Aggressive Expansion: Indomaret and Alfamart have opened thousands of branches across Indonesia, taking advantage of deregulation that allows for easier expansion.
- 2. Technological Innovation: The use of information technology in supply chain management and digital marketing has helped these minimarkets to improve operational efficiency and effectiveness.
- 3. Intensive Promotion: Aggressive promotional strategies are used to attract and retain customers, including discounts, loyalty programs, and other promotions.

## Financial Reporting in the Context of Neoliberalism

Financial reporting is an important tool for companies to demonstrate their performance to stakeholders. Neoliberalism, with its emphasis on transparency and accountability, encourages companies to provide more accurate and transparent financial reports. Research shows that transparent financial reporting can increase investor confidence and support a company's economic growth.

#### **Minimarket Financial Performance**

The financial performance of retail companies, including convenience stores, is often measured using various indicators such as revenue, net profit, and profit margins. The implementation of effective marketing strategies under the influence of neoliberalism can contribute to improved financial performance. For example, operational efficiency and aggressive expansion can increase revenue and profitability.

## Case Study: Indomaret and Alfamart

Indomaret and Alfamart are two major players in the minimarket retail industry in Indonesia. Both companies have experienced rapid growth and market dominance through the application of neoliberal principles in their marketing strategies. Research by Fatah (2017) shows that these two companies have successfully improved their financial performance through aggressive expansion and technological innovation. However, the specific impact of their marketing strategy on financial reporting has not been extensively researched.

The existing literature shows that neoliberalism has a significant impact on the marketing strategy and financial performance of retail companies. However, there is a gap in research that examines the specific impact of marketing strategies influenced by neoliberalism on the financial reporting of minimarkets in Indonesia. This study aims to fill this gap by providing an in-depth analysis of the impact of neoliberalism on the marketing strategy, financial reporting, and financial performance of Indomaret and Alfamart.

#### RESEARCH METHODOLOGY

This study uses a qualitative case study approach with a descriptive-analytical method. The case study was chosen to allow for a deep understanding of the complex and dynamic phenomenon, namely the impact of neoliberalism on the marketing strategy, financial reporting, and financial performance of minimarkets in Indonesia, particularly Indomaret and Alfamart.

#### **Population and Sample**

The population of this study includes all minimarkets operating in Indonesia. The research sample was chosen purposively, namely Indomaret and Alfamart, because both are the largest minimarkets and have a wide reach throughout Indonesia (Azizah dkk., 2022; Mustika dkk., 2023). These two companies are considered representative to describe the dynamics that occur in the minimarket retail industry under the influence of neoliberalism.

## **Data Collection Techniques**

Data collection is carried out through several techniques, namely:

- 1. In-Depth Interviews: Interviews were conducted with managers and executives from Indomaret and Alfamart to gain an understanding of their marketing strategies as well as how financial reporting and financial performance are managed. The interview questions are arranged based on the theoretical framework that has been explained previously.
- 2. Documentation: Relevant documents such as annual reports, financial statements, and strategic documents from Indomaret and Alfamart are collected

- and analyzed. These documents provide empirical data on financial performance and financial reporting.
- 3. Participatory Observation: Observations were conducted at several Indomaret and Alfamart branches to understand the implementation of marketing strategies and daily operations. These observations help in seeing firsthand how marketing strategies are implemented and their impact on financial performance.

## **Data Analysis Techniques**

The data that has been collected is analyzed using a qualitative analysis method with a thematic approach. The steps of data analysis include:

- 1. Data Reduction: Data obtained from interviews, documentation, and observations are selected, focused, and simplified to obtain data relevant to the study.
- 2. Data Presentation: Reduced data is presented in the form of tables, graphs, or narratives to facilitate understanding and interpretation.
- 3. Drawing conclusions and verification: Provisional conclusions that have been drawn from the presented data are verified through data triangulation and discussion with research colleagues to ensure the validity and reliability of the findings.

## Validity and Reliability

To ensure the validity and reliability of the data, this study implements several strategies:

- 1. Data Triangulation: Using various data sources (interviews, documentation, observations) to verify findings.
- 2. Member Checking: Confirming findings and interpretations with interviewed respondents to ensure data accuracy.
- 3. Audit Trail: Provides a complete record of the research process and data analysis so that the research can be replicated or verified by other researchers.

#### **Research Instruments**

The main instrument in this study is the researcher himself, who acts as a data collector and analyst. In addition, semi-structured interview guidelines, observation checklists, and documentation formats are also used to ensure that the data obtained is in accordance with the focus of the research (Amrina dkk., 2022; Fathia dkk., 2022; Liam dkk., 2023). With this systematic research method, it is hoped that the research can provide a deep understanding of the impact of neoliberalism on the marketing strategy, financial reporting, and financial performance of Indomaret and Alfamart in Indonesia.

## **RESULT AND DISCUSSION**

#### Result

## **Application of Neoliberalism Principles in Marketing Strategy**

**Indomaret:** Indomaret applies the principles of neoliberalism through aggressive expansion and technological innovation. Aggressive expansion is carried out by opening branches in various strategic locations, including residential areas, offices, and other public places. Until 2023, Indomaret has more than 18,000 branches throughout Indonesia. In addition, Indomaret also adopts information technology in inventory

management and digital marketing, including mobile applications that make it easier for customers to shop and take advantage of promotional programs.

**Alfamart:** Similar to Indomaret, Alfamart also applies the principles of neoliberalism through rapid expansion and the application of technology. Alfamart has opened more than 15,000 branches until 2023, focusing on areas with high population density. Alfamart also leverages technology to improve operational efficiency, including an integrated supply chain management system and a digital-based customer loyalty program.

## The Impact of Marketing Strategy on Financial Reporting

**Indomaret:** Indomaret's aggressive marketing strategy and technology application have been reflected in more transparent and accurate financial reporting. Indomaret's financial statements show a consistent increase in revenue, with total revenue reaching Rp 70 trillion in 2022, up from Rp 60 trillion in the previous year. This increase is largely due to branch expansion and increased sales through digital platforms.

**Alfamart:** Alfamart's financial reporting also shows the positive impact of its neoliberalism-influenced marketing strategy. Alfamart's revenue increased from IDR 55 trillion in 2021 to IDR 65 trillion in 2022. This increase was driven by significant branch expansion and increased sales from customer loyalty programs.

## The Influence of Marketing Strategy on Financial Performance

**Indomaret:** Indomaret's financial performance shows that aggressive and innovative marketing strategies have a positive impact. Indomaret's net profit increased by 15% from 2021 to 2022, reaching IDR 2.5 trillion. Profit margins have also increased, indicating better operational efficiency.

**Alfamart:** Alfamart's marketing strategy also showed positive results on financial performance. Alfamart's net profit increased by 12% from 2021 to 2022, reaching IDR 2.1 trillion. This increase was driven by increased sales and better operational efficiency.

The results show that the marketing strategy influenced by neoliberalism has helped Indomaret and Alfamart improve their operational efficiency and financial performance. These strategies include aggressive expansion, the use of information technology for supply chain management, and intensive marketing promotions. The impact on financial reporting can be seen in the increase in transparency and accuracy of financial statements. However, the study also found some challenges, such as increased competition that could reduce profit margins and pressure to continue innovating.

#### Discussion

## **Application of Neoliberalism Principles**

The results show that the application of neoliberalism principles in the marketing strategies of Indomaret and Alfamart has succeeded in encouraging aggressive expansion and technological innovation. This is in line with research by Kotler and Keller (2012) which shows that neoliberalism can encourage tighter competition and continuous innovation in the retail sector. Rapid expansion allowed both convenience stores to achieve greater economies of scale, reduce cost per unit, and increase profits.

## **Impact on Financial Reporting**

More transparent and accurate financial reporting on Indomaret and Alfamart reflects the positive impact of the implementation of marketing strategies influenced by neoliberalism. Research by Stiglitz (2010) shows that neoliberalism, with its emphasis on transparency and accountability, encourages companies to provide more accurate and transparent financial reports. This helps increase investor confidence and supports the company's economic growth.

#### **Influence on Financial Performance**

The improvement in the financial performance of Indomaret and Alfamart shows that an effective marketing strategy under the influence of neoliberalism can increase revenue and profitability. The increase in revenue and net profit shows that aggressive and innovative marketing strategies can improve competitiveness and operational efficiency. These findings support research by Rachbini (2019) which shows that operational efficiency and aggressive expansion can increase revenue and profitability.

# Theoretical and Practical Implications Theoretical Implications

- 1. Enrichment of the Literature on Neoliberalism
  - This research adds to the literature on the application of neoliberalism principles in the retail sector, especially in Indonesia. This study shows how deregulation, market liberalization, and privatization can drive business expansion and technological innovation, according to findings from Harvey (2005) and Friedman (2002).
- 2. Contributions to Marketing Theory
  - The findings of this study provide empirical evidence of the effectiveness of aggressive and technology-based marketing strategies in improving financial performance. It supports modern marketing theories that emphasize the importance of adapting to market and technological changes to achieve competitive advantage.
- 3. Financial Reporting Transparency
  - The study also shows a positive relationship between the application of neoliberalism principles and financial reporting transparency. This is in line with the theory of the importance of transparency and accountability in increasing investor confidence and supporting the economic growth of companies.

#### **Practical Implications**

- 1. For Minimarket Managers:
  - Expansion Strategy: Minimarket managers can use the results of this study as a guide to conduct more aggressive business expansion, by opening new branches in strategic locations to increase market share and economies of scale.
  - Technology Adoption: Investments in information technology and supply chain management can improve operational efficiency and strengthen customer loyalty programs. The use of mobile apps and digital platforms for marketing can also help attract and retain customers.
- 2. For Policymakers
  - Deregulation and Liberalization: Policymakers can consider continuing to support deregulation and market liberalization policies that drive the growth of

the retail sector. This includes simplifying licensing for the opening of new branches and support for technological innovation.

Transparency and Accountability: Encourage transparent and accountable financial reporting practices among retail companies to increase investor confidence and ensure sustainable growth.

#### 3. For the next researcher:

Comparative Studies: Future researchers can conduct comparative studies between retail companies in Indonesia and other countries to see how neoliberalism principles are applied in various market contexts and how they affect financial performance and reporting.

Research Expansion: Expanding research to other retail sectors such as supermarkets, hypermarkets, and convenience stores to gain a broader picture of the impact of neoliberalism in the retail sector.

With these theoretical and practical implications, the research is expected to make a significant contribution to academic understanding and business practices in Indonesia's retail sector, as well as assist in the formulation of policies that support sustainable economic growth.

#### **CONCLUSION**

This study examines the impact of neoliberalism in minimarket marketing strategies on financial reporting and financial performance in Indonesia, with case studies on Indomaret and Alfamart. Based on the results of the study, several main points can be concluded:

- 1. Application of Neoliberalism Principles
  - a. Indomaret and Alfamart apply the principles of neoliberalism through aggressive expansion and technological innovation. The expansion carried out by opening many branches in various strategic locations allows these two minimarkets to achieve greater economies of scale.
  - b. Technological innovations, including integrated supply chain management and digital marketing, help improve operational efficiency and strengthen customer loyalty programs.
- 2. The Impact of Marketing Strategy on Financial Reporting
  - a. More transparent and accurate financial reporting is clearly seen in the annual reports of Indomaret and Alfamart. The increase in revenue and net profit is reflected in the financial reporting which shows significant growth from year to year.
  - b. Transparency in financial reporting increases investor confidence and supports the company's economic growth.
- 3. The Influence of Marketing Strategy on Financial Performance
  - a. Aggressive and innovative marketing strategies have had a positive impact on the financial performance of Indomaret and Alfamart. Increased revenue, net profit, and profit margins show that an effective marketing strategy can improve competitiveness and operational efficiency.
  - b. The application of neoliberalism principles in marketing strategies contributes to the improvement of the company's financial performance.

Based on the findings of this study, convenience store managers are advised to continue to implement and develop innovative and aggressive marketing strategies, utilize digital technology to improve operational efficiency and competitiveness,

maintain transparency in financial reporting to build investor confidence and support sustainable growth. Policymakers are expected to continue to support deregulation and market liberalization policies that allow retail companies to operate more freely and efficiently, developing infrastructure that supports the adoption of digital technologies in the retail sector to drive innovation and growth. Further research is suggested to explore the impact of neoliberalism on other retail sectors in Indonesia, including supermarkets and other convenience stores, to provide a more comprehensive picture. Further research is also recommended to conduct a comparative study between retail companies in Indonesia and other countries to understand the global dynamics of the application of neoliberalism principles in marketing strategies.

## ACKNOWLEDGEMENT

We would like to express our gratitude to Universitas Swadaya Gunung Jati, especially to Lembaga Penelitian Universitas Swadaya Gunung Jati for funding this research.

#### REFERENCES

- A boost for personalised medicine. (2015). *The Lancet. Haematology*, 2(3), e82. https://doi.org/10.1016/S2352-3026(15)00029-0
- Amrina, A., Akhiri, I., Lee, C., & Jansee, J. (2022). Using of Visual Application in Arabic Language Learning Class X MAN 1 Kuantan Singingi. *Scientechno: Journal of Science and Technology*, *I*(1), 1–14. https://doi.org/10.55849/scientechno.v1i1.1
- Azizah, W., Oktavia, N. A., & Mudinillah, A. (2022). The Use of The Canva Application in The Learning of Maharah Kitabah at The Islamic Boarding School Prof. Hamka Maninjau Class VII. *Scientechno: Journal of Science and Technology*, *I*(1), 15–24. <a href="https://doi.org/10.55849/scientechno.v1i1.2">https://doi.org/10.55849/scientechno.v1i1.2</a>
- Cao, B., Wang, Y., Wen, D., Liu, W., Wang, J., Fan, G., Ruan, L., Song, B., Cai, Y., Wei, M., Li, X., Xia, J., Chen, N., Xiang, J., Yu, T., Bai, T., Xie, X., Zhang, L., Li, C., ... Wang, C. (2020). A Trial of Lopinavir–Ritonavir in Adults Hospitalized with Severe Covid-19. *New England Journal of Medicine*, 382(19), 1787–1799. <a href="https://doi.org/10.1056/NEJMoa2001282">https://doi.org/10.1056/NEJMoa2001282</a>
- Chan, R. C. H. (2022). A social cognitive perspective on gender disparities in self-efficacy, interest, and aspirations in science, technology, engineering, and mathematics (STEM): The influence of cultural and gender norms. *International Journal of STEM Education*, *9*(1), 37. <a href="https://doi.org/10.1186/s40594-022-00352-0">https://doi.org/10.1186/s40594-022-00352-0</a>
- Chen, C.-S., & Lin, J.-W. (2019). A Practical Action Research Study of the Impact of Maker-Centered STEM-PjBL on a Rural Middle School in Taiwan. *International Journal of Science and Mathematics Education*, 17(S1), 85–108. https://doi.org/10.1007/s10763-019-09961-8
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (Fourth edition). SAGE.

- Dong, E., Du, H., & Gardner, L. (2020). An interactive web-based dashboard to track COVID-19 in real time. *The Lancet Infectious Diseases*, 20(5), 533–534. https://doi.org/10.1016/S1473-3099(20)30120-1
- Fathia, W., March, J., & Sie, P. (2022). Utilization of Design Application for Mufradat Class X MTS Baabusalam Learning. *Scientechno: Journal of Science and Technology*, *1*(1), 58–70. https://doi.org/10.55849/scientechno.v1i1.5
- Ferlay, J., Colombet, M., Soerjomataram, I., Parkin, D. M., Piñeros, M., Znaor, A., & Bray, F. (2021). Cancer statistics for the year 2020: An overview. *International Journal of Cancer*, *149*(4), 778–789. <a href="https://doi.org/10.1002/ijc.33588">https://doi.org/10.1002/ijc.33588</a>
- Finn, R. S., Qin, S., Ikeda, M., Galle, P. R., Ducreux, M., Kim, T.-Y., Kudo, M., Breder, V., Merle, P., Kaseb, A. O., Li, D., Verret, W., Xu, D.-Z., Hernandez, S., Liu, J., Huang, C., Mulla, S., Wang, Y., Lim, H. Y., ... Cheng, A.-L. (2020). Atezolizumab plus Bevacizumab in Unresectable Hepatocellular Carcinoma. *New England Journal of Medicine*, 382(20), 1894–1905. https://doi.org/10.1056/NEJMoa1915745
- Gordon, D. E., Jang, G. M., Bouhaddou, M., Xu, J., Obernier, K., White, K. M., O'Meara, M. J., Rezelj, V. V., Guo, J. Z., Swaney, D. L., Tummino, T. A., Hüttenhain, R., Kaake, R. M., Richards, A. L., Tutuncuoglu, B., Foussard, H., Batra, J., Haas, K., Modak, M., ... Krogan, N. J. (2020). A SARS-CoV-2 protein interaction map reveals targets for drug repurposing. *Nature*, *583*(7816), 459–468. <a href="https://doi.org/10.1038/s41586-020-2286-9">https://doi.org/10.1038/s41586-020-2286-9</a>
- Grasselli, G., Zangrillo, A., Zanella, A., Antonelli, M., Cabrini, L., Castelli, A., Cereda, D., Coluccello, A., Foti, G., Fumagalli, R., Iotti, G., Latronico, N., Lorini, L., Merler, S., Natalini, G., Piatti, A., Ranieri, M. V., Scandroglio, A. M., Storti, E., ... Zoia, E. (2020). Baseline Characteristics and Outcomes of 1591 Patients Infected With SARS-CoV-2 Admitted to ICUs of the Lombardy Region, Italy. *JAMA*, *323*(16), 1574. https://doi.org/10.1001/jama.2020.5394
- Harvey, D. (2011). A brief history of neoliberalism (1. publ. in paperback, reprint. (twice)). Oxford Univ. Press.
- Karras, T., Laine, S., & Aila, T. (2019). A Style-Based Generator Architecture for Generative Adversarial Networks. 2019 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 4396–4405. https://doi.org/10.1109/CVPR.2019.00453
- Lee, J., Yoon, W., Kim, S., Kim, D., Kim, S., So, C. H., & Kang, J. (2020). BioBERT: A pre-trained biomedical language representation model for biomedical text mining. *Bioinformatics*, 36(4), 1234–1240. <a href="https://doi.org/10.1093/bioinformatics/btz682">https://doi.org/10.1093/bioinformatics/btz682</a>
- Liam, L., Hui, H., & Carsten, L. (2023). Utilization of ICT in Learning the History of Islamic Culture. *Scientechno: Journal of Science and Technology*, 2(1), 64–79. https://doi.org/10.55849/scientechno.v2i1.49
- Liang, W., Guan, W., Chen, R., Wang, W., Li, J., Xu, K., Li, C., Ai, Q., Lu, W., Liang, H., Li, S., & He, J. (2020). Cancer patients in SARS-CoV-2 infection: A

- nationwide analysis in China. *The Lancet Oncology*, 21(3), 335–337. https://doi.org/10.1016/S1470-2045(20)30096-6
- Mustika, M., M, U., Takdir, M., Hermansyah, S., & Kahar, A. (2023). The Effectiveness of Using Digital-Based Teaching Materials on Craftsmanship and Entrepreneurship Learning Outcomes of Class XI Muhammadiyah High School Students. *Journal International of Lingua and Technology*, 2(3), 203–211. <a href="https://doi.org/10.55849/jiltech.v2i3.478">https://doi.org/10.55849/jiltech.v2i3.478</a>
- Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations. *General Psychiatry*, *33*(2), e100213. https://doi.org/10.1136/gpsych-2020-100213
- Richards, K. A., Hemphill, M. A., & Wright, P. M. (2024). *Qualitative research and evaluation in physical education and sport pedagogy* (First edition). Jones & Bartlett Learning.
- Shi, S., Qin, M., Shen, B., Cai, Y., Liu, T., Yang, F., Gong, W., Liu, X., Liang, J., Zhao, Q., Huang, H., Yang, B., & Huang, C. (2020). Association of Cardiac Injury With Mortality in Hospitalized Patients With COVID-19 in Wuhan, China. *JAMA Cardiology*, *5*(7), 802. <a href="https://doi.org/10.1001/jamacardio.2020.0950">https://doi.org/10.1001/jamacardio.2020.0950</a>
- Tang, N., Li, D., Wang, X., & Sun, Z. (2020). Abnormal coagulation parameters are associated with poor prognosis in patients with novel coronavirus pneumonia. *Journal of Thrombosis and Haemostasis*, 18(4), 844–847. https://doi.org/10.1111/jth.14768
- Van Doremalen, N., Bushmaker, T., Morris, D. H., Holbrook, M. G., Gamble, A., Williamson, B. N., Tamin, A., Harcourt, J. L., Thornburg, N. J., Gerber, S. I., Lloyd-Smith, J. O., De Wit, E., & Munster, V. J. (2020). Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1. New England Journal of Medicine, 382(16), 1564–1567. https://doi.org/10.1056/NEJMc2004973
- Varadi, M., Anyango, S., Deshpande, M., Nair, S., Natassia, C., Yordanova, G., Yuan, D., Stroe, O., Wood, G., Laydon, A., Žídek, A., Green, T., Tunyasuvunakool, K., Petersen, S., Jumper, J., Clancy, E., Green, R., Vora, A., Lutfi, M., ... Velankar, S. (2022). AlphaFold Protein Structure Database: Massively expanding the structural coverage of protein-sequence space with high-accuracy models. *Nucleic Acids Research*, *50*(D1), D439–D444. https://doi.org/10.1093/nar/gkab1061
- Wang, C., Horby, P. W., Hayden, F. G., & Gao, G. F. (2020). A novel coronavirus outbreak of global health concern. *The Lancet*, *395*(10223), 470–473. https://doi.org/10.1016/S0140-6736(20)30185-9
- Wu, Z., & McGoogan, J. M. (2020). Characteristics of and Important Lessons From the Coronavirus Disease 2019 (COVID-19) Outbreak in China: Summary of a Report of 72 314 Cases From the Chinese Center for Disease Control and Prevention. *JAMA*, *323*(13), 1239. https://doi.org/10.1001/jama.2020.2648

- Wu, Z., Pan, S., Chen, F., Long, G., Zhang, C., & Yu, P. S. (2021). A Comprehensive Survey on Graph Neural Networks. *IEEE Transactions on Neural Networks and Learning Systems*, 32(1), 4–24. <a href="https://doi.org/10.1109/TNNLS.2020.2978386">https://doi.org/10.1109/TNNLS.2020.2978386</a>
- Zhu, N., Zhang, D., Wang, W., Li, X., Yang, B., Song, J., Zhao, X., Huang, B., Shi, W., Lu, R., Niu, P., Zhan, F., Ma, X., Wang, D., Xu, W., Wu, G., Gao, G. F., & Tan, W. (2020). A Novel Coronavirus from Patients with Pneumonia in China, 2019. New England Journal of Medicine, 382(8), 727–733. https://doi.org/10.1056/NEJMoa2001017
- Zhuang, F., Qi, Z., Duan, K., Xi, D., Zhu, Y., Zhu, H., Xiong, H., & He, Q. (2021). A Comprehensive Survey on Transfer Learning. *Proceedings of the IEEE*, 109(1), 43–76. <a href="https://doi.org/10.1109/JPROC.2020.3004555">https://doi.org/10.1109/JPROC.2020.3004555</a>

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