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THE INFLUENCE OF POLITICAL PARTIES IN THE 2024 BENGKULU PROVINCIAL GUBERNATORIAL ELECTION: A CORRELATION AND ANOVA ANALYSIS

Fierianti Fierianti¹

J.H. Isabel D. Gultom²


Arum Pujiastuti³

Chesa Nabilla Azzahra⁴

Etis Sunandi^{5*}

^{1,2,3,5}*Universitas Bengkulu, Indonesia*

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esunandi@unib.ac.id

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Abstract || This study examines the role of political parties in the 2024 Bengkulu Gubernatorial Election using a quantitative survey-based approach. Data were collected from 33 respondents in Muara Bangka Hulu District, Kandang Limun Village, through stratified random sampling based on age groups. The study focuses on three key variables: the influence of political parties, perceptions of political parties, and financial support. Correlation analysis revealed a strong positive relationship between the variables, with the highest coefficient observed between political party influence and public perception (0.877). However, ANOVA results indicated no statistically significant impact of political parties on voter preferences (p -value = 0.231). These findings suggest that while political parties play a role in electoral dynamics, other factors such as candidate characteristics and local political issues may have a greater influence on voter decisions.

Keywords || Political Parties; Gubernatorial Election; Stratified Sampling; Correlation Analysis

Abstrak || Penelitian ini menganalisis pengaruh partai politik dalam pemilihan Gubernur Bengkulu 2024 menggunakan pendekatan kuantitatif berbasis survei. Data dikumpulkan dari 33 responden di Kecamatan Muara Bangka Hulu, Kelurahan Kandang Limun, menggunakan stratified random sampling berdasarkan kelompok usia. Tiga variabel utama diteliti: pengaruh partai politik, persepsi terhadap partai, dan dukungan finansial. Analisis korelasi menunjukkan hubungan positif yang kuat antar variabel, dengan koefisien tertinggi antara pengaruh partai politik dan persepsi (0.877). Namun, hasil ANOVA mengindikasikan tidak ada perbedaan signifikan dalam pengaruh partai politik terhadap preferensi pemilih (p -value = 0.231). Temuan ini menunjukkan bahwa meskipun partai politik memiliki peran penting, faktor-faktor lain seperti figur kandidat dan isu lokal mungkin lebih berpengaruh dalam menentukan pilihan pemilih.

Katakunci || Partai Politik, Pemilihan Gubernur, Stratified Sampling, Analisis Korelasi

Introduction

One form of community involvement in the political process is participation in general elections. Elections serve as a mechanism for the public to engage in selecting leaders and determining the direction of national or regional governance for a specified period (Noor et al., 2021; Sejati & Suryandari, 2024). In an era where democracy receives widespread global attention, the implementation of democratic elections has become a crucial requirement for establishing national leadership. The primary function of elections in a democratic system is to produce leadership that genuinely reflects the will of the people. Consequently, elections serve as a means of legitimizing political authority.

The electoral process provides a context in which political parties must fulfill their essential responsibilities, including nominating their most qualified candidates for legislative positions, promoting their political agendas and platforms, and competing for public mandates and votes (Hermanto et al., 2020). Beyond these immediate objectives, political parties must also function as intermediaries between the public and governmental institutions in the long term. To effectively fulfill this role, political parties must be democratically structured and deeply rooted in society, enabling them to transmit democratic values to the community (Merkel & Lührmann, 2021).

The election of governors is a critical component of a democratic system, granting citizens the opportunity to select leaders who align with their aspirations (Pempel, 2018). This process is not merely about appointing regional leaders but also serves as a reflection of political dynamics and public preferences in selecting candidates perceived as capable of driving change (Grove, 2007). In the context of the 2024 Bengkulu Provincial Gubernatorial Election, the role of political parties is particularly significant. In addition to endorsing candidates, political parties influence public opinion and shape voter preferences (Widiyarti & Sunaryanto, 2023). Through various campaign strategies, they seek to build a positive image of their candidates and garner public support based on proposed visions, missions, and policy programs.

One of the primary strategies employed is the use of social media as a dominant tool for political communication. Social media enables political parties and candidates to reach a broader audience, engage directly with the public, and disseminate campaign messages rapidly and effectively. When utilized optimally, social media can serve as a

powerful instrument for shaping public perceptions and enhancing candidates' electability in gubernatorial elections.

Political parties are fundamental institutions within Indonesia's political system, serving as vehicles for political socialization, communication, leadership recruitment, and the articulation of public aspirations. Their existence constitutes a central element of the democratic process, as they connect public interests with government policies (Muslih et al., 2021). However, in practice, discrepancies often arise between the aspirations conveyed through political parties and the policies ultimately implemented. Many policies fail to fully reflect public interests due to various factors, including political elite agendas, pressure from influential groups, and internal party dynamics that shape decision-making processes.

As organizations that facilitate political elites in attaining power, political parties also encounter significant challenges in maintaining a coherent vision and mission (Kristiyanto et al., 2023). The complexity of political dynamics, internal divisions, and competition among party members often hinder their ability to sustain stability and fulfill their role as drivers of a healthy democracy.

The larger a political party, the broader its mass base and the stronger the loyalty of its supporters. This increases the likelihood that the party's nominated candidate will achieve electoral success. Voter loyalty, particularly among those who identify closely with a party that advocates for the interests of the people, provides a significant electoral advantage.

In the context of the 2024 Bengkulu Gubernatorial Election, political parties play a strategic role in fostering connections with the community, particularly through innovative and creative political marketing strategies. Additionally, Public political participation is strongly influenced by political awareness and socio-economic factors, which pose challenges for political parties in capturing voter attention and earning public trust (Pablo Beramendi & Levi, 2024).

This study aims to examine the influence of political parties on the gubernatorial nomination process in Bengkulu Province for the 2024 election. Furthermore, it seeks to analyze how political parties contribute to shaping political strategies and forming coalitions that influence the selection of gubernatorial candidates. Beyond political strategy, this study also explores public perceptions of the role of political parties in the candidate selection process. Understanding these perceptions is crucial for assessing the level of public trust in political

parties' role in electoral democracy, particularly in regional head elections.

To evaluate the relationship between campaign strategies and electoral success, this study employs statistical analysis methods, including ANOVA, correlation analysis, and linear regression. These methods enable the identification of key factors contributing to the effectiveness of campaign strategies implemented by political parties and candidates in the Bengkulu gubernatorial election.

Methodology

This study employs a quantitative, survey-based approach to collect data from the community in Muara Bangka Hulu District, Kandang Limun Village, Bengkulu City Indonesia. The survey aims to analyze the influence of political parties on community preferences in selecting candidates for the 2024 Bengkulu gubernatorial election. The study population consists of eligible voters, with a sample of 33 respondents selected using the stratified random sampling method based on age groups: Generation Z (17–24 years), the Millennial Generation (25–39 years), and Generation X (40–54 years).

Stratified random sampling is a sampling technique designed to ensure that all segments of the population are adequately represented, thereby increasing efficiency and reducing estimation errors (Giri, 2024; Ozturk & Kavlak, 2019). In this method, the population is divided into distinct, non-overlapping strata, and samples are drawn independently from each stratum. If simple random sampling is applied within each stratum, the resulting sample is classified as a stratified random sample (Raifman et al., 2022).

The purpose of stratification is to obtain more precise estimates of population subdivisions by treating each stratum as a separate population (Nguyen et al., 2021). For instance, in household surveys, strata may be categorized based on factors such as province, income group, occupation, or age. Additionally, stratification facilitates administrative tasks, including survey organization and fieldwork distribution. In some cases, different populations require distinct sampling methods; for example, individuals residing in institutional settings such as hospitals may be grouped separately from those living in private households.

Stratification enhances the accuracy of overall population estimates. When a heterogeneous population is divided into internally homogeneous strata, the variance within each stratum decreases,

allowing for more precise estimates with a smaller sample size (Iliyasu & Etika, 2021). Finally, the estimation results from each stratum are aggregated to provide a more comprehensive representation of the population.

Data collection was conducted using a self-administered questionnaire distributed via Google Forms. The research instrument comprises three main variables: the influence of political parties in the gubernatorial election, perceptions of political parties and gubernatorial candidates, and the role of political parties in financial support. The questionnaire consists of 23 systematically structured statements measured on a five-point Likert scale: 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree).

Data analysis in this study includes both descriptive and inferential statistical methods. Descriptive statistics are used to summarize the data through measures such as the minimum value, first quartile, median, mean, third quartile, and maximum value. Inferential analysis involves the use of Analysis of Variance (ANOVA) to assess variability within the data and correlation analysis to examine relationships between variables, particularly between perceptions of political parties, gubernatorial candidates, and the role of financial support in shaping political party influence in the gubernatorial election.

The research process begins with identifying the target population and selecting the appropriate sample. This is followed by the development of the questionnaire as the primary research instrument. After distribution to the designated respondents, validity and reliability tests are conducted to ensure data accuracy. The collected data are then analyzed using ANOVA and correlation analysis with the assistance of RStudio. Finally, a comprehensive review is performed before compiling the findings into a final research paper.

Analysis and Discussion

Descriptive Statistics

Descriptive statistics provide a general overview of the data for the three variables under study. The results are summarized in the table below:

Table 1. Descriptive statistics

Variabel	Influence of Political Parties	Influence of Political Parties	Financial Support
Influence of Political Parties	1.00	0.8775916	0.8279714
Perception of Parties	0.8775916	1.00	0.7206324
Financial Support	0.8279714	0.7206324	1.00

The descriptive data indicate that most respondents assigned relatively high values to the variable of the influence of political parties, as evidenced by the highest average score (26.73) compared to the other two variables. The data distribution ranges from 8 to 40, with a concentration between 24 and 31. The financial support variable has the second-highest average (26.64), with a distribution between 8 and 40, predominantly clustered between 24 and 30. In contrast, the perception of parties' variable has the lowest average (22.64), with values ranging from 7 to 35, but more centered around 21 to 26.

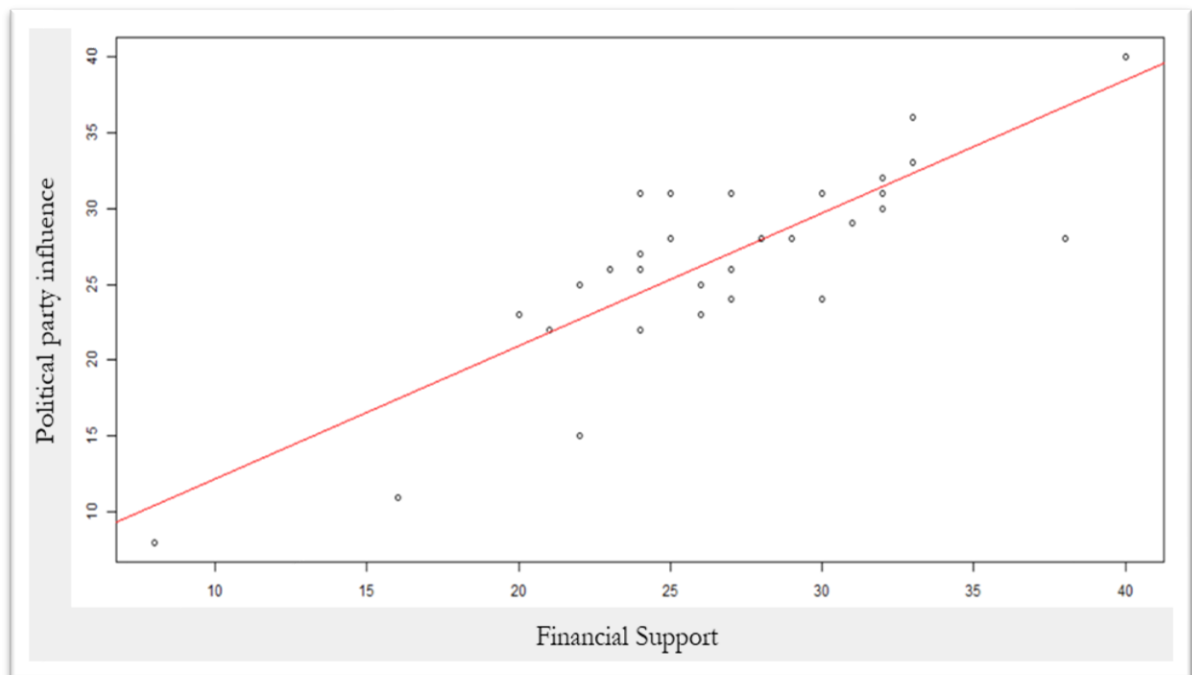


Figure 1. Output plot depicting the relationship between financial support and the influence of political parties

The general pattern of the data suggests that voter preferences for gubernatorial candidates are influenced by the political party's influence and the financial support provided by the parties backing the candidates. These two factors play a significant role in shaping voter decisions, as political parties with strong influence and substantial financial resources tend to have greater electoral advantages. While the perception of political parties has a slightly lower average value compared to the influence of parties and financial support, it remains

an important factor in voter decision-making. Voters may assess political parties based on their track record, leadership, and overall credibility before deciding on a candidate.

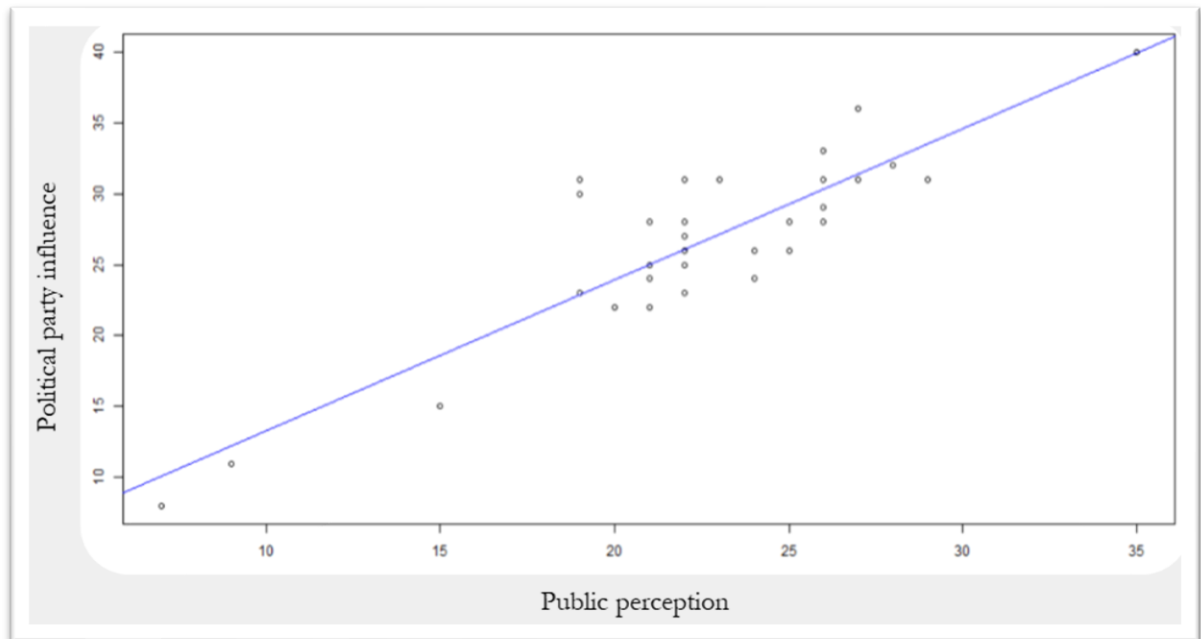


Figure 2. Output plot depicting the relationship between public perception and the influence of political parties

The relatively similar mean values across the three variables suggest that some respondents believe their preferences for gubernatorial candidates are shaped not only by financial support and party influence but also by their perceptions of the parties themselves. This implies that voter behavior is multifaceted, incorporating both tangible factors like financial resources and intangible elements such as trust in political institutions. The findings indicate that while financial support and party influence are crucial in gubernatorial elections, public perception of political parties should not be overlooked. Political parties must work toward improving their image and credibility to enhance voter trust and secure broader electoral support.

Anova Results

The analysis of variance (ANOVA) was conducted to determine whether political parties influence the selection of gubernatorial candidates in the 2024 Bengkulu Province election. The ANOVA summary results are presented in the table below:

Table 2. Anova summary

	Df	Sum of Sq	Mean Sq	F value	Pr(>F)
Strategy	2	83.1	41.55	1.538	0.231
Residuals	30	810.5	27.02		

The Anova results indicate that the p-value (0.231) is greater than the significance level of 0.05. This suggests that there is insufficient statistical evidence to conclude that political parties have a significant influence on the selection of gubernatorial candidates in Bengkulu Province in 2024. The variation among political parties (Sum of Squares = 83.1) is relatively small compared to the within-group variation (Residuals = 810.5), indicating that differences in political parties are not substantial enough to significantly influence voter preferences.

Additionally, the limited sample size (df residual = 30) may have contributed to the model's inability to detect small differences that could exist between political party groups. These findings suggest that, within the scope of this study, political parties are not the primary determinant of voter choice. Further research with a larger sample size and additional variables is necessary to obtain more comprehensive insights.

Based on the correlation and Anova analysis results, differences in the influence of political parties, public perceptions of parties, and financial support from parties were observed in the 2024 Bengkulu gubernatorial election. These three factors contribute to shaping voter preferences, albeit with varying degrees of significance. The findings suggest that political dynamics in Bengkulu are influenced by multiple factors, including public perceptions of political parties and the resources available to each party.

The influence of political parties plays a crucial role in shaping voter preferences. Parties with a strong public image and broad support tend to be more influential in shaping electoral choices. However, the results indicate that this influence is not statistically significant in distinguishing voter preferences between parties. This suggests that voters consider not only party affiliation but also other factors, such as candidate characteristics and prevailing political issues, when making electoral decisions.

Furthermore, public perception of political parties reflects the diversity of views among voters. This perception is closely related to both the influence of political parties and the financial support they receive. However, the analysis indicates that perceptions of political parties do not significantly differentiate voter preferences. Other

factors, such as the policies proposed by candidates or a party's track record in governance, also play a role in shaping voter choices.

Financial support is another important factor that can enhance party influence and shape public perception. Parties with substantial financial resources are typically more active in political campaigns and promotional efforts. However, the findings suggest that financial support does not have a statistically significant effect on differentiating voter preferences among parties. This underscores the need for more innovative and effective campaign strategies to maximize the impact of financial expenditures on voter decisions.

Although political parties, public perceptions of parties, and financial support play roles in the 2024 Bengkulu gubernatorial election, these factors alone are not significant enough to differentiate voter preferences across parties. This indicates that other elements—such as candidate profiles, local issues, and proposed policies—may have a greater impact on voter decision-making. Consequently, political parties should refine their strategies to enhance their effectiveness in garnering voter support.

Conclusion

The analysis indicates that while the influence of political parties, perceptions of parties, and financial support are interrelated, they are not statistically significant in differentiating voter preferences among parties. Political parties contribute to shaping voter choices by enhancing their public image and increasing financial support. However, despite their strong correlation, these factors are not necessarily the primary determinants of voting decisions. Perceptions of political parties reflect the diverse viewpoints within society, shaped by individual experiences, expectations, and access to political information. Meanwhile, financial support serves as a strategic factor in enhancing party competitiveness, particularly in campaign activities and voter mobilization. Nevertheless, this study finds that voter preferences are more significantly influenced by other factors, such as candidate characteristics, emerging political issues, or broader socio-economic conditions.

Therefore, political parties must adopt more innovative strategies to enhance their effectiveness in influencing voter decisions comprehensively. Parties should align their approaches with the evolving trend of increasingly critical and rational voters, optimize data-driven campaign strategies, and foster stronger relationships with

constituents. By doing so, political parties can increase their appeal and solidify their position in the competitive political landscape.

References

Journals

- Giri, O. P. (2024). Choosing Sampling Techniques and Calculating Sample Size. *Indonesian Journal of Teaching in Science*, 4(2), 165–176. <https://doi.org/10.17509/ijotis.v4i2.75472>
- Hermanto, J., Purwatiningsih, A., & Rifa'i, M. (2020). The Influence of Issues, Figures, Track Record and Political Parties on Voter Participation in the 2019 Presidential Election. *Reformasi: Scientific Journal of Social and Political Sciences*, 10(1), 27–33. <http://dx.doi.org/10.33366/rfr.v10i1.1694>
- Iliyasu, R., & Etika, I. (2021). Comparison of Quota Sampling and Stratified Random Sampling. *Biometrics & Biostatistics International Journal*, 10(1), 24–27. <https://doi.org/10.15406/bbij.2021.10.00326>
- Kristiyanto, H., Arinanto, S., & Ghafur, H. S. (2023). Institutionalization and Party Resilience in Indonesian Electoral Democracy. *Heliyon*, 9(12), e22919. <https://doi.org/10.1016/j.heliyon.2023.e22919>
- Merkel, W., & Lührmann, A. (2021). Resilience of Democracies: Responses to Illiberal and Authoritarian Challenges. *Democratization*, 28(5), 869–884. <https://doi.org/10.1080/13510347.2021.1928081>
- Muslih, M., Perdana, A. P., & Kurnia, K. F. (2021). Peran Partai Politik dalam Penyelenggaraan Pemilu Yang Aspiratif dan Demokratif. *Justicia Sains: Jurnal Ilmu Hukum*, 6(1), 180–202. <https://doi.org/10.24967/jcs.v6i1.1334>
- Nguyen, T. D., Shih, M.-H., Srivastava, D., Tirthapura, S., & Xu, B. (2021). Stratified Random Sampling from Streaming and Stored Data. *Distributed and Parallel Databases*, 39, 665–710. <https://doi.org/10.1007/s10619-020-07315-w>
- Noor, F., Siregar, S. N., Hanafi, R. I., & Sepriwasa, D. (2021). The Implementation of Direct Local Election (Pilkada) and Money Politics Tendencies: The Current Indonesian Case. *Politik Indonesia: Indonesian Political Science Review*, 6(2), 227–246. <https://doi.org/10.15294/ipsr.v6i2.31438>

- Pablo Beramendi, T. B., & Levi, M. (2024). Political Equality: What Is It and Why Does It Matter? *Oxford Open Economics*, 3(1), 262–281. <https://doi.org/10.1093/ooec/odad055>
- Raifman, S., DeVost, M. A., Digitale, J. C., Chen, Y.-H., & Morris, M. D. (2022). Respondent-Driven Sampling: a Sampling Method for Hard-to-Reach Populations and Beyond. *Current Epidemiology Reports*, 9, 38–47. <https://doi.org/10.1007/s40471-022-00287-8>
- Sejati, H., & Suryandari, W. D. (2024). Legal Vacuum Regarding the Election of the Head of the District Which is Followed by Only a Single Candidate. *Mahkamah: Jurnal Riset Ilmu Hukum*, 2(1), 1–13. <https://doi.org/10.62383/mahkamah.v2i1.281>
- Widiyarti, D., & Sunaryanto, H. (2023). Political Participation during the Covid Pandemic. *Jurnal Sosial Humaniora*, 14(2), 143–161. <https://doi.org/10.30997/jsh.v14i2.7902>

Books

- Grove, A. K. (2007). *Political Leadership in Foreign Policy: Manipulating Support across Borders* (1st ed.). Palgrave Macmillan. <https://doi.org/10.1057/9780230604339>
- Ozturk, O., & Kavlak, K. B. (2019). Statistical Inference Using Stratified Ranked Set Samples From Finite Populations. In *Ranked Set Sampling: 65 Years Improving the Accuracy in Data Gathering* (pp. 157–170). Academic Press. <https://doi.org/10.1016/B978-0-12-815044-3.00012-5>
- Pempel, T. J. (2018). Introduction: Uncommon Democracies: The One-Party Dominant Regimes. In R. Pekkanen (Ed.), *Critical Readings on the Liberal Democratic Party in Japan* (pp. 352–386). Brill. https://doi.org/10.1163/9789004380523_015