



Para Saan Ka Bumoboto?

Determining Factors Influencing Voter Motivations Through Multivariate Analyses

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ABSTRACT

The 2025 Philippine midterm elections marks another period of history for the democracy of the country. However, factors affecting voter's motivation remain underexplored. In light of the upcoming elections, the researchers aim to identify the factors that motivate voters to participate in the electoral process and group the observations based on their common characteristics. The study is conducted to determine underlying motivations of eligible voters, specifically in the University of the Philippines Diliman community. A survey was administered on 187 members of the UP Diliman community for the primary data to be used in the study. Moreover, multivariate analyses are employed to examine the data. Principal Component Analysis (PCA) was employed to determine the appropriate number of factors to consider, resulting in the identification of four factors. Factor analysis was used to identify four factors that explain voting motivations—*Aksesibilidad*, *Tindig*, *Sistema*, and *Pangsarili*. Using cluster analysis, the researchers identified three clusters that share common characteristics in relation to voting motivations, namely, *Para sa Bayan*, *Para sa Sarili*, and *Para Kanino Ka?*. Findings reveal that encouraging eligible voters to participate in elections requires a comprehensive approach consisting of logistical accessibility, promoting civic responsibility, ensuring systemic efficiency, and strengthening voter empowerment. This analysis is valuable for identifying critical aspects within the community that need to be addressed to effectively encourage Filipinos to engage in the electoral process.

Keywords: *voter motivation, midterm election, multivariate analysis, principal component analysis, factor analysis, cluster analysis*

INTRODUCTION

Background of the Study

The 2025 midterm elections in the Philippines is fast approaching. With this, Filipinos are preparing for another crucial event in the country's democratic history. According to the Commission on Elections (COMELEC), there are a total of 18,271 elective positions in the national and local government for the midterm elections. While politicians actively campaign to secure one of these positions, the Filipino masses get ready to participate in the electoral process—a process that allows them to reassess the current political landscape, influence policy direction, and hold both national and local leaders accountable to the people they serve.

The act of voting is often seen as a democratic right, enabling citizens to exercise their voice in society. This right of suffrage is a political right according to Article V of the 1987 Philippine Constitution which allows every eligible Filipino citizen to take part in the process of governance (Commission on Human Rights, 2021). However, it is equally important to understand the diverse motivations that drive Filipinos to go out to their precincts and vote other than ensuring checks and balances that safeguard the country's democracy. Most probably, not all Filipinos will have the same motivations going into election day.

According to Bali et al. (2020), motivations behind voter participation are shaped by various structural, personal, and sociopolitical factors, which can vary significantly among individuals. Logistical considerations such as the efficiency of the voting process and the accessibility of registration can improve or hinder voter engagement, particularly among marginalized populations (Lowy Institute, 2024). Moreover, personal factors also play a critical role in motivations for voting (Publicus Asia, 2024)—these factors are shaped by their personal experiences with past elections and government policies and programs, or lack thereof. Lastly, sociopolitical dynamics such as external pressure from family and peers or economic incentives like vote-buying, can further shape voter motivation and behavior.

With this, the upcoming midterm election, scheduled for May 12, 2025, is not just a political event. Rather, it is a reflection of the collective aspirations the Filipino people have for the country, as well as the challenges faced by the Filipino masses. By exploring underlying factors that influence these motivations, the study aims to understand the patterns in voter behavior and attitudes. The analyses conducted would provide valuable insights into the democratic process of the country, fostering informed participation.

Statement of the Problem

Amid the current political and socio-economic landscape of the Philippines, citizens should continuously demand a government that is fair and just, and more importantly, one that can be held accountable. The upcoming 2025 midterm elections provide a platform for Filipino citizens to voice out their concerns and allow them to elect leaders whose advocacies align with key issues in the country that need to be prioritized. However, apart from this, the question of why people vote remains largely unexplored. With this in mind, this study aims to examine, understand, and provide explanations behind the voting motivations of Filipinos.

Research Objectives

Particularly, this study focuses on identifying the factors that influence the voting intentions of the UP Diliman community. The following objectives will guide the researchers in this endeavor:

1. To identify the factors that influence the voting motivations of the University of the Philippines Diliman community.
2. To analyze the relationship between voter motivations and political participation of the UP Diliman community, understanding how different motivations correlate with levels of engagement in an electoral process
3. To assess how key sociodemographic factors shape the voting behavior of the UP Diliman community
4. To devise relevant recommendations for enhancing electoral engagement.

Significance of the Study

The study aims to identify the factors that influence the voting motivation of the University of the Philippines Diliman (UPD) community. Moreover, the study also seeks to identify the homogeneous groups to which the respondents belong, based on the set of factors. The resulting factors and clusters could help understand voting behavior—which may uncover why people vote. Moreover, these factors may be used by policymakers to determine which among these factors could be an effective guide in motivating the UPD community to exercise their right to vote and increase voter participation, primarily in light of the upcoming Philippine midterm elections, as of writing. Ultimately, this research will be helpful in promoting civic engagement and a well-informed electorate.

Scope and Limitation of the Study

This study will focus on identifying the factors influencing the voting motivation of the UPD community. The researchers conducted a survey for the primary data collection method of the study, targeting a representative sample from the university. This includes but is not limited to, students, faculty, vendors, custodial workers, security guards, and administrative workers (non-teaching staff) who are registered voters. The researchers used convenience sampling in surveying the respondents, which may be subject to sampling bias. Moreover, the research relies on survey data, which is subject to certain limitations, such as self-reporting bias. Respondents' answers may not fully reflect their actual behaviors or beliefs due to other factors such as social desirability, time pressure, or recall errors. Additionally, the study captures data at a specific point in time, which may not account for changes in voter attitudes or behaviors over different election seasons. Since the respondents of the study only come from members of the university, the results of the study cannot be used to generalize the Filipino population. Nonetheless, the results of this study can serve as a foundation in furthering studies to broaden the area of the study and future research purposes with similar objectives.

REVIEW OF RELATED LITERATURE

Elections in the Philippines

An election is the official process of choosing a candidate for public office wherein eligible citizens of a state vote to approve or disapprove a candidate's political proposal to hold a position in a government office. According to Article V Section I of the 1987 Philippine Constitution, "Suffrage may be exercised by all citizens of the Philippines not otherwise disqualified by law, who are at least eighteen years of age...". Thus, eligible Filipinos are given the right to uphold the democratic processes that govern the country. Gautam (2019) emphasizes that elections ensure that the government comes from the people; it is exercised by the people, and for the interests of the people. With this, elections guarantee that democratic countries are responsive to popular demand and give citizens political power to choose their leaders.

However, the electoral and political system in the Philippines faces numerous challenges such as vote buying and political dynasties. The prevalence of vote-buying is widely identified as a cause of poor governance in developing country democracies, wherein the political elites use financial resources to undermine the integrity of the electoral process (Foarta et al., 2020). Finan and Schecter (2012) argues that vote-buying strategies are targeted attempts by politicians to weaken electoral discipline, and in extension, democracy. Moreover, many politicians attempt to turn government-elected positions into enduring family assets. A notable example is incumbent Philippine president Ferdinand 'Bongbong' Marcos Jr.'s family, whose members have held various positions of political power across multiple levels of government, dating as early as 1925 (Teehankee, 2023). The intersectionality of these challenges has created a deeply-rooted patronage system in the Philippines that strengthens money politics, especially during elections (Wong, 2022).

Generally, the electoral system in the Philippines requires significant improvements to ensure fairness and transparency. Addressing challenges in the electoral process is critical to restoring the integrity of Philippine democracy. Consequently, these challenges substantially influence the way Filipinos perceive the election process. However, there exists a limited body of research that highlights the negative impact of deficiencies within the Philippine electoral system. This study seeks to examine whether such deficiencies affect the motivation of Filipinos to participate in voting.

Voting Behavior of the Filipinos

Voting behavior refers to the understanding of factors and motivations behind voting patterns. It can be influenced by traditions, social norms, or values which can help explain voter turnout (Becker, 2023). Analyzing voting behavior requires examining the various aspects of choosing a candidate.

According to Brooks (2014), elections take place in a dynamic setting that is influenced by social issues, demographic diversity, and economic cycles, all of which affect the election. For example, political candidates are seen differently during crises than during times of stability. Most politicians try their best to be seen in the limelight during calamities and disasters. Additionally, the platforms that candidates and political parties campaign for may be defined by religious and cultural differences. Abelgas et al. (2022) asserted that voting behavior in the Philippine context is usually influenced by personal decisions and external pressures, making decisions affected by the exploitation of those in power and manipulation of basic needs.

Generally, voters who have different places of residence and precinct locations are less likely to turn out their vote because of the transportation cost (Amos et al., 2017). Moreover, there is a divide in the voting patterns of people from urban and rural areas. In a study by Falcao (2009) in India, he mentioned that voters from urban areas are less enthusiastic about voting and politics compared to those in rural areas. Thus, the difference in voting patterns because of geographical location is present. In a dissertation by Holland (2013), the results implied that age is a significant predictor of voting behavior. However, it relies on the particular election environments. Similarly, Homyamyen et al. (2023) asserted that younger voters are more inclined to support progressive parties or candidates, while older voters support the more conservative ones.

Callaghan et al. (2022) found that voters from higher social classes tend to prefer candidates who are intelligent, confident, and capable because of the perception that they share the same qualities of competencies as these candidates—they lean towards candidates with progressive platforms. People who come from higher social classes often have stable incomes and permanent jobs that contribute to their economic security. On the other hand, Lubbers et al. (2023) hypothesized that people who suffer from economic insecurity, such as labor workers, are more likely to vote for candidates with right-wing ideologies. Moreover, in terms of voter turnout, people who come from lower economic status are less likely to participate in the election than those from higher economic status (Nelson, 2023). In summary, the voting behavior of Filipinos is highly influenced by the different cultural and socio-economic factors that affect them as a voter.

Factors Influencing Voting Motivation

Maslow (1943) identified in his theory that self-actualization is one of the most significant human needs, where individuals seek internal validation by acting in harmony with their personal ideals. In the context of voting, this human need often translates into a sense of personal responsibility to align political actions according to personal values and moral principles. Alexander (2022) concluded that people are driven to vote by a sense of civic duty, rooted in the importance and responsibility they feel towards

voting. It was also highlighted that baby boomers exhibit stronger commitment to fulfilling their electoral responsibilities compared to the succeeding generations.

Moreover, an individual's level of political awareness also plays a significant role in their voting decisions. Those who are well-informed about current issues, policies, and political situations tend to be more engaged and are more likely to vote. Their awareness stems from their connection to societal issues and personal values—fostering a stronger desire for political engagement, particularly in elections (Homyamyen et al., 2023). On the other hand, putting personal values in context, familial and social pressures also serve as key motivators for individuals to exercise their vote, although the impact varies across generations. Alexander (2022) emphasizes generational differences in susceptibility to peer and family influence. For instance, Generation X and Generation Z exhibit greater independence, having minimal interest in their friends and family's voting behavior. In contrast, peer opinions play a pivotal role in shaping the voting choices of millennials, but only by their immediate social circles. Baby boomers, however, are more broadly affected by peer influence which suggests a more traditional alignment with social conformity in their voting behavior. These findings underscore the complex interplay between generations, personal values, and social dynamics in shaping voting motivations.

Generally, as a source of information and a platform for political discourses, media plays a pivotal role in shaping voting motivations. According to Kumar (2020), media outlets inform the public about ongoing political events, key issues, and candidates' stances and policies. Through social media, advertisements, and news coverage, voter awareness increases—thereby helping people to be aware of voting rights and the significance of voting. On the other hand, the voting decisions of an individual are affected by their economic interests and policies that are beneficial to their well-being. Moreover, higher-income individuals are generally more likely to vote. This stems from the fact that information and resources, such as education, are more accessible to them. In the same study, education is revealed to be a strong predictor of voting behavior. People with higher levels of education are more likely to participate in elections since they have greater awareness of societal issues and the ability to critically analyze political information. Furthermore, Alexander (2022) revealed that baby boomers vote much more frequently and in great numbers than all of the successive generations. It was discovered in the study that younger generations view voting as only somewhat important, as compared to older generations who treat voting as very important.

Voters are often drawn to candidates whose views align closely with their own on key issues, implying that this alignment is a decisive factor in showing their support. When significant differences arise, voters are driven to advocate for another candidate that better reflects their priorities or, in some cases, choose not to vote at all (Alexander, 2022). Based on the study of Kim (2014), suspicions of ineffectiveness or unresponsiveness often lead to voter disengagement. A lack of trust in institutions

correlates strongly with political apathy, as individuals become disillusioned to the value of their involvement. Conversely, citizens who picture a fair, just, and accountable government are more inclined to engage in the political process, driven by a belief that their participation can make a meaningful impact towards change.

Research Gap

Despite extensive research on voting behaviors and factors influencing voter motivation in the Philippines, evidence focusing on the specific motivations of Filipino voters to participate in national elections remains limited. Most studies emphasize external factors such as vote-buying, political dynasties, and electoral violence, or demographic influences like social class, age, and geographic location. However, few studies examine how voters prioritize various motivational factors (e.g., civic duty, family expectations, campaign promises, accessibility of voting facilities, and media influence) or how these factors interact with demographic characteristics such as age, gender, socioeconomic status, and geographic location.

Additionally, no existing research employs multivariate analysis techniques to identify the key factors influencing voting behavior and their motivational impact. While much of the literature highlights barriers to voting, it inadequately addresses positive motivations that encourage voter participation. Furthermore, the influence of past voting experiences, such as interactions with government policies, perceptions of electoral fairness, and candidate visibility during crises, on current voting motivations remains underexplored.

There is a need for an in-depth analysis of the factors influencing voting behavior beyond commonly examined variables such as age and geographic location. Specifically, a more detailed investigation is necessary to identify and understand the specific factors that shape voting behavior. Existing research suggests that the voting behavior of Filipinos is significantly influenced by various contextual and intrinsic factors. This study aims to validate this assertion by exploring whether these influences hold in the current electoral context. By addressing this gap, the study seeks to uncover additional motivational factors that drive voter participation, thereby providing valuable insights into the dynamics of voter behavior.

METHODOLOGY

Method of Data Collection

The data used in the analysis are primary data collected by the researchers. A survey questionnaire was developed to capture the variables of interest in the study. For convenience and practicality, the researchers utilized Google Forms to construct the survey questionnaire. The link to the Google Form was distributed through personal messages and face-to-face interactions. Additionally, printed survey questionnaires were employed to gather information from non-student respondents within the UP Diliman (UPD) community. Moreover, a pilot survey was conducted prior to data collection, where a total of 40 respondents completed the survey questionnaire to assess the reliability of the instrument. The reliability analysis yielded a Cronbach's alpha of 0.71, as detailed in *Appendix B*. Based on this result, the researchers proceeded with the data gathering. Data collection took place from November 26 to November 30, 2024.

The population of interest comprises members of the University of the Philippines Diliman (UPD) community, including but not limited to students, vendors, security guards, faculty members, administrative staff, and custodial workers of varying ages. This diverse population was chosen to capture the perceptions, principles, and ideas of individuals in different roles and age groups regarding their motivations for voting in the national election. Voter registration status was a key consideration during data collection, as the researchers aimed to gather insights specifically from registered voters. Furthermore, careful consideration was given to ensure that the study captured the sentiments exclusively of individuals who intend to vote in the upcoming 2025 national election. In total, the questionnaire was administered to 187 respondents who voluntarily agreed to participate in the study.

Research Instrument

The survey questionnaire consists of a series of questions and scales designed to represent the variables of interest, with responses measured on a scale ranging from 1 to 5. It is divided into four sections, each specifically structured to capture distinct aspects of the variables under study. Additionally, the questionnaire includes a data privacy consent form and an introductory section that outlines the purpose and motivation of the data collection. This introduction briefly explains the study's objectives to the respondents. Furthermore, the researchers emphasized that there are no right or wrong answers when responding to the questionnaire.

The questionnaire is structured into four sections, each designed to capture specific data relevant to the study. The first section focuses on the eligibility check, where respondents are asked if they are part of the UP Diliman (UPD) community, are registered voters, and intend to vote in the upcoming 2025

national election. Data collection proceeds only if respondents answer "yes" to all these questions. Additionally, registered voters who do not intend to vote are asked to provide their reasons, which will be utilized as recommendations for future studies.

The second section collects the demographic profile of respondents through a series of questions regarding personal and primary information. This includes sex at birth, age group, role within the UPD community, employment status, active voter status, region, voting precinct region, Indigenous group membership (if applicable), religion, highest educational attainment, and annual income classification. The third section examines the factors influencing voter decision-making. Respondents rate the importance of various aspects on a 5-point Likert scale ranging from *Not Important* to *Extremely Important*. This section aims to assess the significance of different factors to voters. Lastly, the fourth section evaluates respondents' level of agreement with statements related to their motivation to vote in the upcoming 2025 national election. Responses are measured on a 5-point Likert scale ranging from *Strongly Disagree* to *Strongly Agree*. This comprehensive questionnaire design ensures the collection of detailed and relevant data to address the study's objectives.

List of Variables

Table 1. Factors that are important to voters

Variable	Variable Name	Definition
Efficiency of the voting process	EFF	The speed and organization of the voting process, including clear instructions and minimal wait times.
Registration requirements	REQ	Proper registration and valid identification to avoid complications on election day.
Voting schedule	SCHED	Awareness of voting dates and times to avoid missing the opportunity to vote.
Knowledge of candidates	KNOW	Understanding of the candidates' policies, backgrounds, and qualifications.
Election day environment	ENV	The atmosphere at polling stations, such as the absence of harassment or undue political influence.
Awareness of voting laws	LAWS	Familiarity with rules like ballot secrecy, voter assistance policies, and penalties for election violations.
Accessibility of Election Campaigns	ACCESS	Access to campaign events, debates, or rallies.

Variable	Variable Name	Definition
Availability of voting equipment	EQUIP	Reliability and proper functioning of electronic voting machines or manual ballot systems.
Online resources on the election	ONLINE	Access to platforms for checking voter registration status or polling station locations.
Facilities at the voting precinct	PREC	Access to toilets, shaded areas, or seating for elderly or physically challenged voters.
Promises made by politicians during their campaign	CAMP	Trust in the feasibility and sincerity of candidates' campaign promises
Ease in monitoring results	RES	Access to transparent and timely updates on election results to ensure fairness.

Table 2. Statements that influence voter motivation in the electoral process

Variable	Variable Name
Voting is a responsibility of every Filipino to uphold democracy.	DEMO
My family and friends expect me to participate in the elections.	PEER
Voting is a way for me to express my voice in the society.	VOICE
I trust that the election process is fair and transparent.	FAIR
I wish to change the current administration's policies.	CURR
I believe that voting can affect positive change in the country's problems.	CHANGE
I am incentivized with money to vote for politicians.	INCE
I have had positive voting experience/s in the past.	EXP
I have personally felt the impact of the policies of candidates I have supported and won in previous elections.	IMP
Knowing a candidate personally influences my voting intentions.	PER
Media coverage of the election increases my awareness of key social issues.	MEDIA
Visibility/assistance during calamities or the pandemic influences my likelihood of voting.	CAL

Analysis of data

Various multivariate techniques were utilized to analyze and examine the data gathered by the researchers to meet the objectives of the study.

Principal Component Analysis (PCA) was employed to determine the initial number of factors that could be utilized in the study. Various methods derived from PCA were applied to verify the consistency of the results. The methods employed to determine the adequate number of factors included Kaiser's rule, the cumulative percentage of total variance, very simple structure (VSS), and parallel analysis. These methods produced varying results regarding the number of factors. Accordingly, the researchers used these varying results to define the range for determining the appropriate number of factors to be utilized in the study.

Factor analysis was employed to identify the factors influencing the UP Diliman community's motivations to vote in the upcoming 2025 national elections. This analytical approach examines the covariance relationships among variables by uncovering underlying latent factors. Using an orthogonal factor model, the analysis establishes a relationship between common factors and observed variables, while also identifying the proportion of variance in the variables explained by these factors. Additionally, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) was conducted to assess the adequacy of individual variables. Variables with a mean sampling adequacy below 0.7 were excluded from the study. To enhance interpretability, factor rotation was applied, considering various oblique rotation methods such as *oblimin* and *promax*, before determining the final factor solution. Furthermore, variables with communalities less than 0.4 were excluded from the analysis, as they did not significantly contribute to the identified factors. This methodology supports the study's primary objectives of identifying the factors that influence voting intentions of the UP Diliman community.

After accounting for the relevant variables, cluster analysis was employed to categorize the observations into homogeneous groups based on the characteristics of interest. These naturally formed clusters describe patterns and behaviors among voters regarding the factors that motivate them. A *hierarchical approach* was utilized, involving initialization, cluster formation, and iteration, to group the observations based on data density. Various dissimilarity measures and linkage methods were evaluated before determining the final clustering solution. A dendrogram was constructed to visualize the clustering structure. Furthermore, internal validation was applied to identify the optimal number of clusters. This approach aligns with the researchers' objective of assessing how key sociodemographic factors influence the voting behavior of the UP Diliman community.

RESULTS AND DISCUSSION

After the collection of data, researchers conducted analyses using various multivariate techniques. These methodologies were applied to the organized data to achieve the study's objectives. The subsequent sections outline the data analysis method employed in the study.

Descriptive Statistics

This section presents a summary profile of respondents and descriptive measures for each variable, including the mean, median, and standard error. The values for each demographic factor are summarized in the table below.

Table 3. Profiles of Respondents

Demographic Factor	Characteristic	Frequency	Percentage
Sex at birth	Male	82	43.16%
	Female	108	56.84%
Age group	Post-WWII (79-96 years old)	3	1.58%
	Boomer (60-78 years old)	7	3.68%
	Gen X (44-59 years old)	30	15.79%
	Millennials (28-43 years old)	39	20.53%
	Gen Z (12-27 years old)	111	58.42%
Role in UPD community	Student	101	53.16%
	Faculty	12	6.32%
	Vendors	24	12.63%
	Custodial workers	9	4.74%
	Security guards	13	6.84%
	Admin (Non-Teaching staff)	18	9.47%
	Others	13	6.84%
Active voter	Yes	127	66.84%
	No	63	33.16%
Highest educational attainment	Primary/Elementary School	1	0.53%
	Secondary/High School	42	22.11%
	Vocational degree	11	5.79%
	College undergraduate	90	47.37%
	Bachelor's degree	26	13.68%

Demographic Factor	Characteristic	Frequency	Percentage
	Masters degree	13	6.84%
	Doctorate/PhD	5	2.63%
	Prefer not to answer	1	0.53%
	Others: ALS	1	0.53%

The demographic profile of the respondents reveals that the majority are female, accounting for 56.84% of the total, and primarily belong to the Gen Z age group, which constitutes 58.42%. This is followed by Millennials, who make up 20.53% of the respondents. Furthermore, over half of the respondents, 53.16%, are students. In comparison, other roles in the University of the Philippines Diliman (UPD) community include vendors at 12.63%, administrative non-teaching staff at 9.47%, and smaller groups such as faculty, custodial workers, and security personnel. A significant proportion, 66.84%, are active voters. On the other hand, educational attainment presents that nearly half, 47.37%, of the respondents are college undergraduates, while 22.11% have completed secondary education, 13.68% hold a bachelor's degree, and 9.47% have attained a doctorate.

Table 4. Summary Measures for Variables

Variable	Min	Mean	Median	Max	SD
<i>EFF</i>	1	4.20	4.0	5	0.92
<i>REQ</i>	1	4.13	4.0	5	0.95
<i>SCHED</i>	1	4.09	4.0	5	0.96
<i>KNOW</i>	1	4.66	5.0	5	0.78
<i>ENV</i>	1	4.19	4.0	5	0.96
<i>LAWS</i>	1	4.38	5.0	5	0.89
<i>ACCESS</i>	1	4.26	5.0	5	0.99
<i>EQUIP</i>	1	4.43	5.0	5	0.86
<i>ONLINE</i>	1	4.23	4.0	5	0.96
<i>PREC</i>	1	4.19	4.0	5	0.93
<i>CAMP</i>	1	3.93	4.0	5	1.19
<i>RES</i>	1	4.46	5.0	5	0.86
<i>DEMO</i>	1	4.71	5.0	5	0.62
<i>PEER</i>	1	4.25	5.0	5	0.89
<i>VOICE</i>	1	4.57	5.0	5	0.84
<i>FAIR</i>	1	3.27	3.0	5	1.25
<i>CURR</i>	1	4.24	4.5	5	0.92
<i>CHANGE</i>	1	4.38	5.0	5	0.89
<i>INCE</i>	1	1.43	1.0	5	1.03
<i>EXP</i>	1	3.37	3.0	5	1.13

Variable	Min	Mean	Median	Max	SD
<i>IMP</i>	1	3.26	3.0	5	1.15
<i>PER</i>	1	3.46	4.0	5	1.30
<i>MEDIA</i>	1	4.35	5.0	5	0.79
<i>CAL</i>	1	3.83	4.0	5	1.16

The summary measures of the variables show that **VOICE**, **KNOW**, and **DEMO** have the highest means, indicating strong agreement among respondents that voting is a form of self-expression, a democratic responsibility, and that understanding candidates' qualities is important. In contrast, **INCE**, **IMP**, **FAIR**, and **EXP** show lower means and higher variability, suggesting weaker agreement. This indicates that respondents are not incentivized with money to vote and express dissatisfaction with the fairness, transparency, and impact of past elections, as well as their voting experiences.

Principal Component Analysis

This procedure determines the appropriate number of factors to include in the study. Various methods were employed to validate the results across different techniques. A summary of the outcomes for each method is presented in a table, while the scree plot is provided in the *Appendix B* section.

Table 5. Principal components analysis results

Method	Number of Factors
Cumulative Percentage	7
Kaiser Rule	7
Very Simple Structure	5
Parallel Analysis	4

Principal Component Analysis (PCA) was conducted on the standardized variables. Based on the cumulative percentage of total variation with a threshold of 70%, the results suggest retaining seven principal components, which is equivalent to seven factors in the factor analysis. Additionally, according to Kaiser's rule, which recommends retaining factors with eigenvalues greater than 0.7, seven factors should be included. In contrast, the Very Simple Structure (VSS) method suggests retaining five factors, as this minimizes the Bayesian Information Criterion (BIC). Finally, the parallel analysis scree plot indicates that the appropriate number of factors corresponds to the elbow point, which suggests retaining four factors. These methods yielded varying recommendations regarding the number of factors to include, and all were considered to identify the most effective grouping of variables. However, the researchers decided to include four factors based on the scree plot from the parallel analysis.

Factor Analysis

This procedure identifies the underlying interrelationships among the variables considered in the study, which subsequently summarize the key attributes that motivate voters during elections.

For initial analysis, Bartlett's Test of Sphericity was conducted to determine whether factor analysis was appropriate for the study. The test yielded a p-value near zero, indicating the rejection of the null hypothesis, which assumes that the variables are uncorrelated. Therefore, it was concluded that factor analysis is suitable for the data. Additionally, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) was performed to assess whether the variables could be included in the factor analysis. Several variables with an MSA below 0.7 were excluded from the analysis. These variables are *FAIR*, *INCE*, and *IMP*. All results for each conducted test can be found in the *Appendix B* section.

As concluded using PCA, four factors were considered in the model as it provided the most effective groupings for the variables. After establishing the number of factors to include in the study, the researchers conducted a factor analysis using the principal axis method. An oblique rotation was employed, given the presence of correlations among factors. Both oblimin and *promax* rotations were considered, however, the latter yielded the best interpretability. Variables that did not load onto any factor were excluded from the analysis, as well as variables that loaded onto a factor but exhibited low communalities.

Table 6. Factor Structures and Loadings (Correlation)

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Communality
ONLINE	0.91	-0.04	-0.03	-0.04	0.6969987
ACCESS	0.6	0.15	-0.11	0.28	0.6933027
EQUIP	0.53	-0.05	0.25	0.1	0.6087977
RES	0.5	0.02	0.19	0.11	0.5470503
CHANGE	-0.3	0.78	-0.03	0.14	0.445514
CURR	-0.11	0.71	0.01	-0.05	0.4097646
VOICE	0.21	0.68	-0.08	0.09	0.6769865
DEMO	0.07	0.62	0.1	-0.04	0.4735872
PEER	0.41	0.43	0	-0.27	0.4069581
REQ	-0.08	-0.06	0.97	-0.07	0.7219561
EFF	-0.07	0.07	0.76	-0.03	0.5200111
SCHED	0.1	0	0.63	0	0.4942959
LAWS	0.07	0.07	-0.09	0.92	0.8765395
ENV	-0.08	-0.1	0.17	0.7	0.558658
KNOW	0.24	0.19	0.16	0.4	0.6735317

The table above presents the four factors identified by the respondents as key motivators in the election. Each variable was assessed to determine the factor to which it belongs. A variable is included in a factor if its factor loading is at least 0.4. Additionally, each communality was evaluated. The variable explaining the highest portion of variance is 'awareness of voting laws (*LAWS*),' followed by 'Registration requirements (*REQ*).' Thus indicating that these variables are given greater representation in the factor structure. Contrarily, the variable with the lowest variance explained is 'I believe that voting can affect positive change in the country's problems (*CHANGE*).' Overall, the factor loadings of the variables indicate the extent to which these factors influence voters' motivation.

Furthermore, each factor was closely examined, with the variables under each factor considered and assessed for their relevance in explaining the aspects that motivate voters. Additionally, the factors were analyzed alongside their components, and the resulting outputs are presented below:

Table 7. Variables for Factor 1

Factor 1: AKSESIBILIDAD	
<i>Proportion of Variance</i>	16%
Online resources on the election	
Accessibility of Election Campaigns	
Availability of voting equipment	
Ease in monitoring results	

The first factor **Aksesibilidad** accounts for 16% of the total variability explained by the model. This factor is composed of variables that indicate the accessibility and convenience of the electoral process. It includes online resources related to the election, accessibility to election campaigns, the availability of voting equipment, and the ease of monitoring results. This factor emphasizes the importance of creating a voter-friendly environment, which includes having access to logistics and information to ensure that citizens are well-informed and integrated throughout the electoral process.

Table 8. Variables for Factor 2

Factor 2: TINDIG	
<i>Proportion of Variance</i>	15%
I believe that voting can affect positive change in the country's problems.	
I wish to change the current administration's policies.	
Voting is a way for me to express my voice in the society.	
Voting is a responsibility of every Filipino to uphold democracy.	
My family and friends expect me to participate in the elections	

The second factor **Tindig** accounts for 15% of the total variability. This factor is composed of variables that reflect a sense of civic responsibility, personal belief in the power of voting, and social expectations surrounding electoral participation. It includes statements such as believing that voting can bring about positive change, desiring to influence current policies, viewing voting as a civic duty to uphold democracy, and feeling the pressure of family and friends' expectations to vote. This factor emphasizes the importance of personal empowerment, social influence, and dedication to the democratic process in motivating citizens to increase voter participation.

Table 9. Variables for Factor 3

Factor 3: SISTEMA	
<i>Proportion of Variance</i>	14%
Registration requirements	
Efficiency of the voting process	
Voting schedule	

The third factor **Sistema** accounts for 14% of the total variability. This factor is composed of variables related to structural and operational aspects of the election process. It includes elements such as registration requirements, the efficiency of the voting process, and the scheduling of voting. This factor emphasizes the importance of establishing a well-organized and coherent system, including the voters' registration, where there is a systematic and efficient process that enables citizens to participate productively.

Table 10. Variables for Factor 4

Factor 4: PANGSARILI	
<i>Proportion of Variance</i>	13%
Awareness of voting laws	
Election day environment	
Knowledge of candidates	

The fourth factor **Pangsarili** accounts for 13% of the total variability. This factor is composed of variables beneficial to the voters during the campaign and election period. The variables under the fourth factor are awareness of voting laws, election day environment, and knowledge of candidates. These factors build confidence, reduce barriers, and empower informed decision-making—encouraging active participation in the electoral process.

Overall, the total variance explained by the model is 59%, which is sufficient as the factor solution explains almost 60% of the variance of the original data. Moreover, measures of fit can be seen in

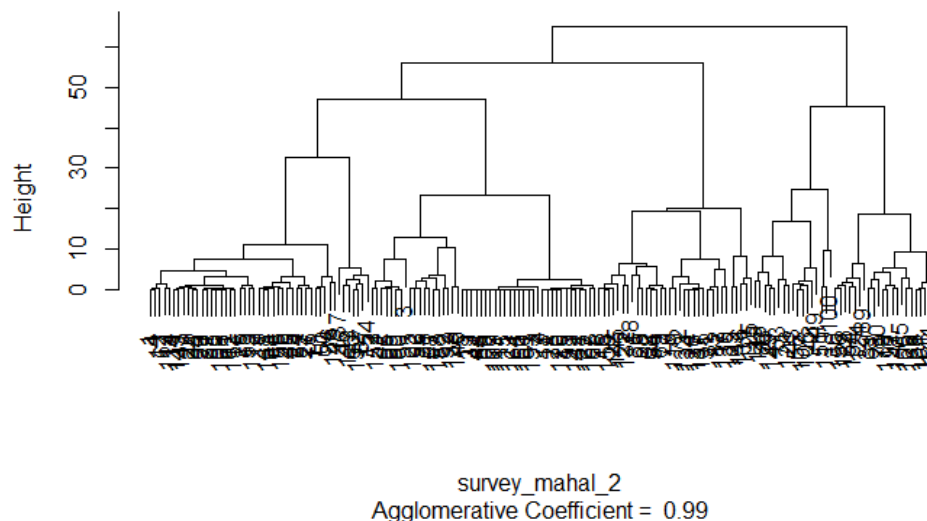
Appendix B, the mean item complexity of 1.4 is close to 1, indicating a simple structure, where items load mainly on one factor. On the other hand, the root mean square error of approximation (RMSEA) is 0.061, thus, the factor solution may be considered as a good fit. Lastly, the Tucker-Lewis Index of 0.946 also indicates a good fit as it is greater than 0.90. From this factor solution, the researchers concluded that the model fits the data well and the specified number of factors is adequate.

Cluster Analysis

This analysis identifies the homogeneous group to which respondents belong, based on the previously identified set of factors that motivate voters in the upcoming national elections. The objective is to determine common patterns among the factors influencing voter motivation.

The initial step is dendrogram construction using various dissimilarity measures and linkage methods to identify the most effective approach. Consequently, the Mahalanobis distance was employed as the final dissimilarity measure to account for the correlation among the factors, while Ward's method was chosen as the linkage method. As they provide a relatively balanced dendrogram output. The figure below is the constructed dendrogram:

Figure 1. Dendrogram of the Clusters



The optimal number of clusters was assessed to determine the final clustering. Several internal validation methods were utilized to finalize the number of clusters. The selected number of clusters was based on achieving the most effective grouping. The table below summarizes the results from the internal validation:

Table 11. Summary of Internal Validations

Internal Validation Measures	
Method	Number of Clusters
Calinski Harabasz	10
Dunn's Index	14
Average Silhouette Width	15
Scott-Symons	3

The researchers identified *three clusters* after analyzing the dendrogram and reviewing the results of the internal validation using clustering indices. Upon examination, the clusters consist of the following number of observations: Cluster 1 contains 95 observations, Cluster 2 contains 33 observations, and Cluster 3 contains 38 observations. The respondents in each cluster were analyzed based on their demographics to identify the underlying common factors influencing their motivation to vote in the upcoming national election.

Table 12. Percentage of Demographic Profiles across Cluster

Demographic Variable		Percentage Per Cluster		
		Cluster 1: <i>PARA SA BAYAN</i>	Cluster 2: <i>PARA SA SARILI</i>	Cluster 3: <i>PARA KANINO KA?</i>
Active Voter	Yes	69.47	69.69	84.21
	No	30.53	30.30	15.79
Sex at Birth	Male	35.79	51.52	57.89
	Female	64.21	48.48	42.11
Age Group	Post-WWII (79-96 years old)	1.05	6.06	0
	Boomer (60-78 years old)	2.11	3.03	2.63
	Gen X (44-59 years old)	12.63	24.24	15.79
	Millennials (28-43 years old)	11.58	18.18	39.47
	Gen Z (12-27 years old)	72.63	48.48	42.11
Role in UPD Community	Student	72.63	36.36	28.95
	Faculty	2.11	6.06	13.16
	Vendors	6.32	24.24	21.05
	Custodial workers	4.21	12.12	2.63
	Security guards	4.21	3.03	5.26
	Admin (Non-Teaching staff)	6.32	9.09	21.05
	Others	4.21	9.09	7.89
Income Classification	Bracket A	11.57	12.12	10.53
	Bracket B	14.74	9.09	23.68
	Bracket C	22.11	24.24	10.53
	Bracket D	25.26	12.12	18.42
	Bracket E1	5.26	9.09	7.89
	Bracket E2	21.05	33.33	28.95

In the first cluster, **Para sa Bayan**, a significant majority of the cluster—about 69.47%—are active voters. The cluster is predominantly female, making up 64.21% of the group. A large proportion falls under the Gen Z age group, representing 72.63%. Meanwhile, smaller age groups belong to Gen X (12.63%) and Boomers (2.11%). Students form the overwhelming majority of the roles in the UPD community, constituting 72.63% of the cluster. Smaller groups include vendors at 6.32% and faculty members at 2.11%. There is also a noticeable diversity in terms of income classification where the largest

share of respondents, 25.26%, belong to Bracket D. This is followed closely by 21.05% from bracket E2 and 18.95% from Bracket C.

Meanwhile, the second cluster, **Para sa Sarili**, includes a significant portion of active voters in the cluster, which is approximately 69.69%. The majority of this cluster are males, making up 51.52% of the group. In terms of age, Gen Z represents the largest proportion, comprising 48.48% of the cluster, followed by Gen X at 24.24% and Millennials at 18.18%. Notably, the non-Gen Z age group collectively makes up the majority in this cluster. Regarding roles in the community, students represent the largest segment at 36.36%, followed by vendors at 24.24% and custodial workers at 12.12%. Despite the significant student population, the cluster is predominantly composed of non-students. In terms of income classification where the largest share of respondents, 33.33%, belong to Bracket E1. This is followed by 24.24% from Bracket C and 12.12% each from both Bracket A and Bracket D.

Lastly, the third cluster, **Para Kanino Ka?**, consists of 84.21% active voters. The majority are male, making up 57.89%, and Gen Z represents the largest age group at 42.11%, closely followed by Millennials at 39.47%. However, the non-Gen Z age group is dominant overall. Students comprise the largest component in terms of community roles at 28.25%, followed by vendors and administrative staff each at 21.05% each. Thus, the cluster is mostly non-students. Students in this cluster have the highest percentage in the cluster in terms of role in the community, comprising 28.25%. It is followed by vendors and admin (non-teaching staff) each at 21.05%. In terms of role in the community, it can be seen that the cluster is predominantly non-students. The cluster shows income diversity where the largest percentage of respondents in this cluster, 28.95%, belong to Bracket E1. This is followed by 23.68% from Bracket B and 18.42% from Bracket D.

Furthermore, the percentages of clusters across various demographic profiles were analyzed, and a summary of the findings is presented below.

Table 13. Percentages of Clusters across Demographic Profiles

Demographic Variable		Percentage Per Cluster		
		Cluster 1: <i>PARA SA BAYAN</i>	Cluster 2: <i>PARA SA SARILI</i>	Cluster 3: <i>PARA KANINO KA?</i>
Active Voter	Yes	39.76	13.86	19.28
	No	17.47	6.02	3.61
Sex at Birth	Male	20.48	10.24	13.25
	Female	36.75	9.64	9.64

Demographic Variable		Percentage Per Cluster		
		Cluster 1: <i>PARA SA BAYAN</i>	Cluster 2: <i>PARA SA SARILI</i>	Cluster 3: <i>PARA KANINO KA?</i>
Age Group	Post-WWII (79-96 years old)	0.60	1.20	0
	Boomer (60-78 years old)	1.20	0.60	0.60
	Gen X (44-59 years old)	7.23	4.82	3.61
	Millennials (28-43 years old)	6.63	3.61	9.04
	Gen Z (12-27 years old)	41.57	9.64	9.64
Role in UPD community	Student	41.57	7.23	6.63
	Faculty	1.20	1.20	3.01
	Vendors	3.61	4.82	4.82
	Custodial workers	2.41	2.41	0.60
	Security guards	2.41	0.60	1.21
	Admin (Non-Teaching staff)	3.61	1.81	4.82
	Others	2.41	1.81	1.81
Income Classification	Bracket A	6.63	2.41	2.41
	Bracket B	8.43	1.81	5.42
	Bracket C	12.65	4.82	2.41
	Bracket D	14.46	2.41	4.22
	Bracket E1	3.01	1.81	1.81
	Bracket E2	12.05	6.63	6.63

Table 13 depicts that among the status of total registered voters, the largest percentage, 39.76%, are active voters who identify with the **Para sa Bayan** cluster, emphasizing a strong sense of patriotism and collective responsibility in the UP Diliman community's voting motivations. On the other hand, 19.28% are active voters belonging to the **Para Kanino Ka?** cluster, which highlights a level of ambiguity and indifference regarding their motivations as they comprise the second largest percentage among active voters. This illustrates that there are individuals who are aware of the importance of voting but have yet to fully articulate or align their motivations with specific ideals. In contrast, the lowest percentage of active voters are in the **Para sa Sarili** cluster, suggesting that individual priorities or personal gain have less influence among active voters.

In terms of their sexes at birth, males are more evenly distributed across clusters, insinuating diverse motivations among male voters. Females, however, show a stronger alignment with cluster 1.

Thus, women are more inclined to prioritize nationalistic interests when voting and are less influenced by personal interests, nor are they uncertain about their purpose.

Among different age groups, the Gen Z predominantly aligned with the **Para sa Bayan** cluster, accounting for 41.57%, which signifies their strong sense of civic duty and dedication to the common good. This suggests that the youngest age group in the UP Diliman community prioritizes national interests over personal motivations. Similarly, Boomers and Gen X largely affiliated in this cluster, indicating a sense of shared responsibility among older generations. In contrast, Post-WWII respondents tend to be concentrated in the **Para sa Sarili** cluster, reflecting a greater emphasis on personal motivations. Lastly, the **Para Kanino Ka?** cluster is greatly composed of Millennials, suggesting unclear motivations compared to other age groups.

Moreover, students exhibit the strongest inclination with the **Para sa Bayan** cluster, stemming from their exposure to higher education, activism, and social issues. This fosters a heightened sense of social responsibility and nationalistic motivations. Notably, vendors tend to fluctuate between the **Para sa Sarili** and **Para Kanino Ka?** clusters, while custodial workers appear to be divided between the **Para sa Bayan** and **Para sa Sarili** clusters. Individuals in other roles show low alignment across all clusters, with their distribution being relatively even. These results may be due to either limited engagement in the survey or a lack of strong motivation tied to the identified categories.

The distribution of clusters across income classifications further reveals interesting patterns in participants' voting motivations. Those with the highest income (Bracket A) show no distinct dominant cluster, suggesting neutrality possibly from their greater financial stability and fewer immediate societal concerns. In contrast, the upper-middle class (Bracket B), middle class (Bracket C), lower-middle class (Bracket D), and lower class (Brackets E1 and E2) show strongest alignment with the **Para sa Bayan** cluster. It is also notable that Bracket D prioritizes collective societal welfare the most, over personal interest. These insights highlight the critical role of socioeconomic status in shaping voter motivations. Higher-income groups may feel less compelled by nationalistic goals while middle-income to lower-income classes balance these motivations with personal needs.

Moreover, the means for each cluster were analyzed for each factor to determine which factors most strongly motivate respondents to vote. The resulting values are presented below:

Table 14. Summary of Mean Score of Clusters per Factor

Clusters	Factors			
	Aksesibilidad	Tindig	Sistema	Pangsarili
Para sa Bayan	0.5115432	0.5341314	0.2876217	0.2560175
Para sa Sarili	0.1013325	-0.6086547	0.1492484	0.2123071
Para Kanino Ka?	-0.5995517	-0.1569169	-0.1437447	-0.1976267

The first cluster, **Para sa Bayan**, exhibits a positive mean percentage across all factors, indicating that these factors strongly motivate voters to participate. Among the four factors, *Tindig* has the highest mean at 0.5341, suggesting that respondents in Cluster 1 are particularly motivated by the desire to improve their community. These individuals are driven to influence change in current policies through their votes. Additionally, *Aksesibilidad* ranks second with a mean of 0.5115, signifying that respondents are more likely to vote when the necessary conditions for the electoral process are properly provided.

In contrast, the two factors with the lowest mean are *Sistema* and *Pangsarili*, at 0.2876 and 0.2560, respectively, indicating that these factors are less influential in motivating voters. This suggests that respondents in this cluster are not voting solely because the system is well-organized or because they are aware of the general electoral process. Given that this cluster is primarily composed of young, active female voters and students from economically diverse backgrounds, their insights suggest that young people are at the forefront of community-driven change. Their electoral participation is far from passive; rather, they view voting as a powerful tool to actively shape policies that resonate with their values.

Not only that, the cluster's enthusiasm for voting is especially evident among students, who are often at the heart of activism, advocacy, and policy discourse across various settings. Viewing through their lenses, elections serve as opportunities to amplify marginalized voices and reshape policies that impact their futures. As the Philippine national hero famously stated, “Kabataan ang pag-asa ng bayan”—the youth are indeed the hope of the nation. Overall, the *Para sa Bayan* cluster vote with a strong sense of responsibility for the well-being of their community, viewing **voting as a powerful act of hope**—a chance to shape a future where the community thrives together, and every voice is heard and valued.

The second cluster, **Para sa Sarili**, reveals a positive mean percentage across all factors except for *Tindig*, which has a mean of -0.6087. Hence, this suggests that respondents in Cluster 2 are motivated not because they want to use their voice for the betterment of the country. Rather, they are motivated to vote when they are aware of aspects such as laws, candidates, and if the election day environment is promising. Thus, this is the factor *Pangsarili*, with a mean of 0.2123. However, this still suggests a weak motivation for those in Cluster 2, as the mean percentage is well below the average. Further, the

second-highest factor, *Sistema*, has a mean percentage of 0.1492, which also suggests that respondents are motivated to vote if variables are personally beneficial to them. Lastly, *Aksesibilidad* is the third-highest factor, with a mean score of 0.1013. Unlike the first cluster, the demographics of cluster 2 is a mix of Millennials and Gen X, and a significant proportion are nonstudents.

Respondents in this cluster do not vote because of their desire for systemic change. There is also a relatively balanced split in sexes at birth in this cluster, indicating that men and women are equally likely to vote, provided that the process is straightforward. Their motivation to vote is rooted in practical factors and their participation in the electoral process is largely situational and conditional—if the system is well-organized, candidates are popular, and voting is accessible and stress-free. This outlook reflects a surface-level engagement, where voting is perceived as a matter of convenience. Overall, the *Para sa Sarili* cluster is **motivated because it is easy**; they do not have any deep engagement or personal drive for change.

The third cluster, **Para Kanino Ka?**, reveals a negative mean percentage across all factors, suggesting that none of the variables under each factor motivates respondents to vote. The factor with the lowest mean percentage score is *Aksesibilidad* at -0.5996, followed by *Pangsarili* at -0.1976, *Tindig* at -0.1569, and *Sistema* at -0.1437. Despite having approximately 85% active voters, this cluster stands out for their lack of conviction, advocacy, or motivation.

Distinct from the previous clusters, their voting behavior is not driven by a desire for change nor systemic improvement. Instead, they vote “just because”—perhaps out of habit, societal expectation, or indifference. Moreover, diverse roles are apparent in this cluster, where nonstudents, such as admin (non-teaching staff) and vendors, dominate the group. These roles are typically older and approach voting passively, with a prospective of routine obligation. Vendors are also often focused on economic survival and are inclined to prioritize day-to-day responsibilities over civic engagement. Likewise, since a significant portion of respondents belong to bracket E2, their economic vulnerability may have caused them to feel disconnected from political systems that they once believed to address their needs. This could indicate that financial distress can lead to **voter fatigue**, where citizens have a tendency to be skeptical of the effectiveness of elections in driving meaningful change. Generally, these are individuals who vote without strong conviction or particular motivation, or simply just because.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

The researchers sought to conduct this study to identify underlying factors that influence the voting motivations of the UP Diliman community, understand how these motivations affect engagement in the electoral process, and assess key sociodemographic factors that shape these voting behaviors.

Factor analysis was performed to answer the first objective of the study. Variables corresponding to statements that were related to voter motivations were analyzed, and from the analysis, four factors were obtained relating to these motivations. These factors are *Aksesibilidad*, *Tindig*, *Sistema*, and *Pangsarili*—which all contribute to well-structured voting environments and a well-informed electorate that are key factors in motivating citizens to vote. Overall, these findings suggest that motivating eligible voters to participate in the election requires a holistic approach that addresses logistical accessibility, fosters civic responsibility, ensures systematic efficiency, and empowers voter empowerment. Incorporating these interrelated factors in our electoral system creates a more inclusive and efficient voting environment, thereby encouraging more Filipinos to exercise their mandated right to vote.

Cluster analysis was performed to answer the second and third objectives. The observations were grouped into clusters that share a common characteristic of interest related to voter motivation. The clusters derived from the observations are: *Para sa Bayan*, *Para sa Sarili*, and *Para Kanino Ka?*. The means for each cluster using the factor scores were analyzed to determine which factors most strongly motivate respondents to vote. From this, the eligible voters to participate in the upcoming national elections can be divided into those who are highly motivated by a desire for change in the community and systemic improvement, those who are motivated by practical factors for their convenience, and those who vote without strong conviction. This information is valuable for policymakers in identifying key aspects within the community that require attention to effectively motivate Filipinos to participate in the electoral process.

To have a more comprehensive analysis, specific demographics for every cluster were obtained in the analysis. This aims to evaluate the demographic profile of respondents within each cluster, which can be utilized to analyze the mean percentage of each factor. Consequently, this provides insights into the relationship between demographic profiles and the mean percentage scores of the factors. Generally, findings reveal that the first cluster, *Para sa Bayan*, is primarily composed of Gen Z students who are active in the voting process. Interestingly, the second and third clusters, *Para sa Sarili*, and *Para Kanino Ka?*, respectively, are characterized by more non-student members of the community, who belong to older age groups. Overall, the findings from the demographics of each cluster can be used to inform targeted campaigns and strategies that best fit the voter profiles from each cluster.

Recommendations

For future researchers who wish to build upon this study and expand the scope of identifying factors that influence voter motivations, it is recommended to develop a comprehensive survey questionnaire that includes more detailed demographic profiles of respondents, such as political ideology, alongside a broader range of questions aimed at capturing various voting motivations influencing voter behavior—exploring additional factors beyond the common dimensions of the factors in this study. External factors such as electoral violence, vote buying, and political dynasties can be explored in-depth to assess how these factors significantly influence voter motivations. Moreover, post-election voter satisfaction can also be examined to capture perceptions regarding the election process and outcomes.

In addition, expanding the geographical scope of the survey beyond the UP Diliman community to encompass different provinces across the Philippines could provide valuable insights into the differences in voting motivation between urban and rural populations. Additionally, increasing the sample size would enhance the precision of the estimates and the overall reliability of the findings. Future researchers may also consider applying more complex multivariate techniques to examine the data more comprehensively. Lastly, incorporating open-ended questions in the survey questionnaire could provide deeper insights into the respondents' needs and perspectives as voters.

REFERENCES

- Abelgas, F. J., Carreon, R.E.M., & Loyola, Loyola, F. M. (2022). *Debunking The Term "Bobotante": The Eichmann Problem And The Recurring Voters' Behavior In The Philippines*. Letran Research Center. <https://research-manila.lettran.edu.ph/read/218>
- Alexander, A. (2022). *Voting behavior and motivations across generations: Evidence from a nationally representative U.S. survey*. [Honors theses, Sally McDonnell Barksdale Honors College]. eGrove. https://egrove.olemiss.edu/cgi/viewcontent.cgi?article=3702&context=hon_thesis
- Amos, B., Smith, D.A. & Ste. Claire, C. Reprecincting and Voting Behavior. *Polit Behav*, 39, 133–156 (2017). <https://doi.org/10.1007/s11109-016-9350-z>
- Becker, R. (2023). Voting behavior as social action: Habits, norms, values, and rationality in electoral participation. *Rationality and Society*, 35(1), 81-109. <https://doi.org/10.1177/10434631221142733>
- Brooks, C. (2014). Introduction: Voting Behavior and Elections in Context. *The Sociological Quarterly*, 55(4), 587–595. <https://doi.org/10.1111/tsq.1207>
- Callaghan, B., Dovidio, J., & Kraus, M. (2022). Social class predicts preference for competent politicians, *Journal of Experimental Social Psychology*. Volume 100, 104298, ISSN 0022-1031, <https://doi.org/10.1016/j.jesp.2022.104298>.
- Eulau, H., Webb, P. D., & Gibbins, R. (2024). *Election | History, polls, results, date, & facts*. Encyclopedia Britannica. <https://www.britannica.com/topic/election-political-science>
- Falcao, V. (2009). Urban Patterns of Voting and Party Choices. *Economic and Political Weekly*, 44(39), 99–101. <http://www.jstor.org/stable/25663604>
- Finan, F., & Schechter, L. (2012). Vote buying and reciprocity. *Econometrica* 80(2): 863–881. <https://www.jstor.org/stable/41493836>
- Foarta, D., Leight, J., Pande, R., & Ralston, L. (2020). Value for money? Vote-buying and politician accountability. *Journal of Public Economics*, 190, 104227. <https://www.sciencedirect.com/science/article/abs/pii/S0047272720300918>
- Gautam, G. (2019). Comparative Study on Democracy and Election. *Nepal Law Review*, 28(1-2), 159-173. <https://www.nepjol.info/index.php/nlr/article/view/57527>
- Homyamyen, P., Kulachai, W., & Lerdtomornsakul, U. (2023). Factors influencing voting decision: A comprehensive literature review. *Social Sciences*, 12(9), 469. <https://doi.org/10.3390/socsci12090469>
- Kim, H. (2014). Generalised trust, institutional trust and political participation: A cross-national study of fourteen Southeast and Centred Asian Countries. *Asian Journal of Social Science*, 42(6), 695–721. <http://www.jstor.org/stable/43495834>

- Kumar, R. (2020). Analysing The Factors Affecting Voting Behaviour Of Urban Voters And Role Of Media In Influencing The Voters: A Study Based On Factor Analysis. *Shodh Sanchar Bulletin*, 10(40), 179-187.
https://www.researchgate.net/publication/372913951_ANALYSING_THE_FACTORS_AFFECTING_VOTING_BEHAVIOUR_OF_URBAN_VOTERS_AND_ROLE_OF_MEDIA_IN_INFLUENCING_THE_VOTERS_A_STUDY_BASED_ON_FACTOR_ANALYSIS
- Lubbers, M., Sipma, T., & Spierings, N. (2023). Working class economic insecurity and voting for radical right and radical left parties. *Social Science Research*, 109.
<https://www.sciencedirect.com/science/article/pii/S0049089X22000849>
- Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50, 370-306.
<https://psychclassics.yorku.ca/Maslow/motivation.htm>
- Merriam-Webster Dictionary. (2024). election. <https://www.merriam-webster.com/dictionary/election>
- Nelson, M., (2023). Explaining socioeconomic disparities in electoral participation: The role of health in the SES-voting relationship, *Social Science & Medicine*, Volume 320, 115718, ISSN 0277-9536, <https://doi.org/10.1016/j.socscimed.2023.115718>.
- Teehankee, J. (2023). *Beyond Nostalgia: The Marcos Political Comeback in the Philippines*. Southeast Asia Centre.
https://eprints.lse.ac.uk/119819/3/Southeast_Asia_Working_Paper_7_Beyond_Nostalgia_The_Marcos_Political_Comeback_in_the_Philippines.pdf
- Wong, A. (2022). *Philippine elections and the politics behind it*. The Interpreter.
<https://www.lowyinstitute.org/the-interpreter/philippine-elections-politics-behind-it>

APPENDICES

Appendix A: R codes

Factor Analysis

```
### Filtered data according to KMO
vote3 <- vote %>% select(Column1, Column2, Column3, Column4, Column5, Column6, Column7,
Column8, Column9, Column10, Column11, Column12, Column13, Column14, Column15, Column17,
Column18, Column22, Column23, Column24)
real_vote_motive <- as.data.frame(na.omit(vote3))
standardized_motive <- scale(real_vote_motive, center=T, scale=T)

### Doing the factor analysis
final_vote <- vote %>% select(Column1, Column2, Column3, Column4, Column5, Column6, Column7,
Column8, Column9, Column12, Column13, Column14, Column15, Column17, Column18)
final_vote_motive <- as.data.frame(na.omit(final_vote))
final_standardized_motive <- scale(final_vote_motive)
fa <- fa.sort(psych::fa(r = final_standardized_motive, nfactors = 4, rotate = "Promax", scores =
"regression", SMC = T, fm = "pa"))
```

Cluster Analysis

```
factors <- as_tibble(fa$scores)
### Determining Outliers
factors %>% bind_cols(pc$x) %>% mutate(id = row_number(), dist = dist_from_center, tag = if_else(dist >
qchisq(0.98, 2), "might be outlier", "ok")) %>% ggplot(aes(x = PC1, y = PC2)) +
geom_text(aes(label = id, col = tag)) + ggthemes::theme_gdocs()
factors %>% bind_cols(pc$x) %>% mutate(id = row_number(), dist = dist_from_center2, tag =
if_else(dist > qchisq(0.98, 2), "might be outlier", "ok")) %>% ggplot(aes(x = PC3, y = PC4)) +
geom_text(aes(label = id, col = tag)) + ggthemes::theme_gdocs()

### Mahalanobis Distance
mahal <- function(x, cx = NULL) {
  x <- as.data.frame(x)
  if(is.null(cx)) cx <- cov(x)
  out <- lapply(1:nrow(x), function(i) {mahalanobis(x = x, center = do.call("c", x[i, ]), cov =
cx, tol=1e-20)})
  return(as.dist(do.call("rbind", out)))
}
survey_mahal <- mahal(factors_new)

### Cluster means
cluster_summary <- as_tibble(factors_new) %>% mutate(cluster = ward_cluster1) %>%
group_by(cluster) %>% summarise_all(.funs = mean) %>% rename(Aksesibilitas = PA4, Tindig = PA2,
Sistema = PA3, Pangsarili = PA1)
cluster_summary

### Cluster demographics
```



```
##### CLUSTER 1 #####
```

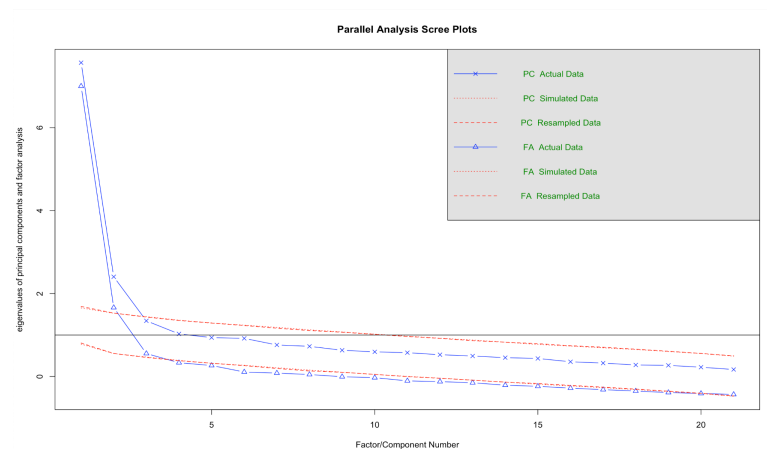
```
(active_cluster_1 <- cluster_1_data %>% group_by(cluster, active) %>% summarise(count=n(),
.groups='drop') %>% mutate(percentage=(count/sum(count))*100))
```

Appendix B: Additional Results

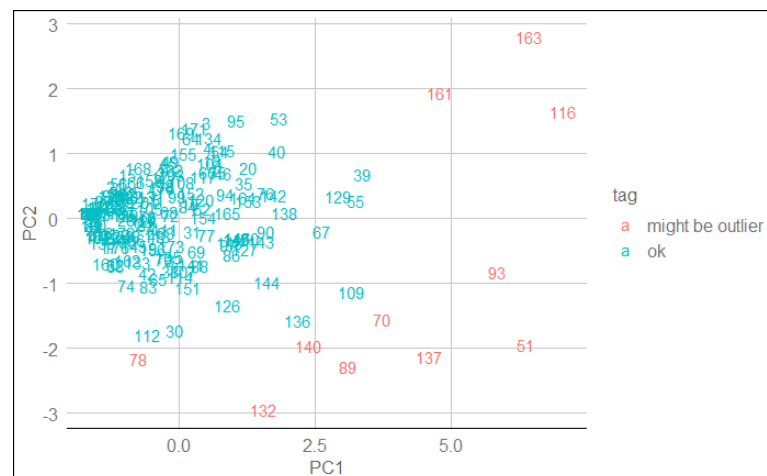
Cronbach's Alpha

```
## Reliability analysis
## Call: psych::alpha(x = reliable)
##
##      raw_alpha std.alpha G6(smc) average_r S/N   ase mean sd median_r
##          0.71    0.74    0.92    0.11 2.8 0.065 4.1 0.3    0.087
##
```

Parallel Analysis Scree Plot



Determining Outliers





Kaiser-Meyer-Olkin Measure of Sampling Adequacy

```
Call: KMO(r = voterm)
Overall MSA = 0.87
MSA for each item =
  p1  p2  p3  p4  p5  p6  p7  p8  p9  p10 p11 p12 p13 p14 p15 p16 p17 p18 p19 p20 p21
0.89 0.86 0.88 0.91 0.86 0.86 0.91 0.92 0.92 0.94 0.92 0.92 0.89 0.86 0.91 0.63 0.81 0.83 0.57 0.72 0.66
  p22 p23 p24
0.73 0.86 0.84
```

Mean item complexity, RMSEA, Tucker-Lewis Index

```
Mean item complexity = 1.4
Test of the hypothesis that 4 factors are sufficient.

df null model = 105 with the objective function = 8.16 with Chi Square = 1437.68
df of the model are 51 and the objective function was 0.49

The root mean square of the residuals (RMSR) is 0.03
The df corrected root mean square of the residuals is 0.04

The harmonic n.obs is 183 with the empirical chi square 30.85 with prob < 0.99
The total n.obs was 183 with Likelihood Chi Square = 85.52 with prob < 0.0018

Tucker Lewis Index of factoring reliability = 0.946
RMSEA index = 0.061 and the 90 % confidence intervals are 0.037 0.083
BIC = -180.16
Fit based upon off diagonal values = 1
Measures of factor score adequacy
```