

Developing and Validating a Political Knowledge Questionnaire for First-Time Voters in Malaysia (Undi18)

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ABSTRACT

Political knowledge is a cornerstone of democratic participation, yet first-time voters often face significant knowledge deficits. In Malaysia, the Undi18 reform, which lowered the voting age to 18 and introduced automatic voter registration, has expanded the electorate by millions of youth whose readiness for informed participation remains underexplored. This study develops and validates a Political Knowledge Questionnaire tailored for Malaysia's new electorate, focusing on three key domains: Democracy Information, Election Information, and Political Party Information. The instrument was adapted from established frameworks and refined through expert review (VREP), face validity assessments, and pilot testing (N=60), with internal consistency confirmed using Cronbach's alpha and dimensional clarity assessed via Exploratory Factor Analysis (EFA). A larger sample (N=547) was then analyzed using Confirmatory Factor Analysis (CFA) to establish construct validity. The initial 22-item model demonstrated strong factor loadings but poor overall fit (CMIN/DF = 8.029, RMSEA = .113, CFI = .862). After modification, three items (MD2, MPI1, MPI3) were removed, resulting in a 20-item model with robust factor loadings (.64–.89), acceptable inter-construct correlations, and excellent fit indices (CMIN/DF = 3.133, RMSEA = .063, CFI = .966, GFI = .922, TLI = .958). The validated instrument fills a critical methodological gap in Malaysian political communication scholarship by providing a reliable, context-specific tool to assess the political knowledge of Undi18 voters. Beyond methodological contribution, the study highlights the democratic urgency of equipping youth with the knowledge necessary for meaningful participation, offering policymakers, educators, and civil society an empirical basis for interventions that strengthen civic literacy and empower Malaysia's youngest electorate.

Keywords: Political Knowledge, Democracy Information, Election Information, Political Party Information, First-Time Voters, Undi18

INTRODUCTION

Across the globe, first-time voters are entering the electorate at a moment of democratic uncertainty. Their inclusion symbolizes both renewal and vulnerability, offering new voices to representative institutions while demanding that these citizens navigate environments marked by disinformation, polarization, and declining trust in governance. Understanding their level of political knowledge has thus become a matter of both scholarly and societal urgency. Political knowledge forms the bedrock of democratic participation, shaping how citizens interpret political institutions, evaluate policies, and make informed choices (Gherghina & Marian, 2024). Individuals who are politically knowledgeable tend to demonstrate stronger political efficacy, critical evaluation, and accountability, all of which contribute to political readiness (Grobshäuser & Weißenö, 2021). Among first-time voters, political knowledge directly determines the ability to align preferences with choices and discern credible information sources in complex media environments (Walder & Strijbis, 2023).

However, measuring political knowledge among first-time voters remains conceptually and methodologically challenging. Existing instruments are largely designed for electorates with established political experience, partisanship, and policy familiarity (Anderson, 2025). Such instruments often conflate general civic literacy with political sophistication, overlooking how first-time voters, lacking prior electoral engagement, develop understanding through alternative means such as peer influence, digital media, and civic education (Goenaga & Hansen, 2024). Moreover, internal political efficacy, or the belief in one's political competence, tends to be less developed among these groups, resulting in underestimation of their actual knowledge structures. Scholars have increasingly argued that first-time voters' political knowledge is mediated by contextual factors including socioeconomic background, media exposure, and self-efficacy (Gherghina & Tap, 2024), yet these influences are rarely captured in traditional instruments.

The urgency of these issues is particularly evident in Malaysia following the enactment of the Undi18 policy, which lowered the voting age from 21 to 18 and introduced automatic voter registration. This reform expanded the electorate by approximately 5.8 million new voters aged 18–21 during the 2022 general election (Mohd Faizal, 2023). The demographic transformation was immediate and profound, as millions of first-time voters entered the political system with little or no prior voting experience. Understanding their political knowledge is critical to assessing both their capacity for informed participation and the resilience of Malaysia's democratic institutions.

Although Malaysian scholars have explored related dimensions such as political maturity, media use, and media literacy (Kasmani, 2024; Halim et al., 2021; Tajuddin et al., 2023), these studies commonly rely on generic survey items developed for older or more politically experienced populations. Such tools assume familiarity with party systems and electoral cycles, assumptions that are not reliable for Malaysia's first-time voters. Comparative evidence from Indonesia and Thailand underscores how political knowledge is shaped by social media exposure among young electorates (Halim et al., 2024; Kantaros et al., 2025), while European and Australian studies continue to stress the enduring importance of education and socioeconomic status (Malafaia & Ferreira, 2023). Together, these findings point to universal determinants of knowledge such as motivation and opportunity, but also highlight regional variations shaped by media ecosystems and political culture (Nanz et al., 2022).

To address this gap, the present study develops and validates a Political Knowledge Questionnaire specifically designed for Malaysia's Undi18 electorate. Grounded in international theoretical frameworks yet tailored to Malaysia's socio-political context, this study aims to construct and validate a measurement tool using data from Malaysian first-time voters through exploratory and confirmatory factor analyses. The instrument conceptualizes political knowledge through three domains: democracy information, election information, and political party information.

BACKGROUND OF STUDY

Political knowledge refers to the range of factual information about politics that individuals store in their long-term memory. It is a central concept in the study of public opinion and political behavior, influencing various democratic processes and behaviors such as voter turnout, issue-based voting, and support for democratic norms. Political knowledge is also synonymous with political awareness and sophistication, indicating a person's expertise in the realm of politics (Barabas et al., 2014).

Political knowledge has long been recognized as a fundamental prerequisite for meaningful democratic participation. Citizens who possess accurate information about political institutions, processes, and policies are better positioned to evaluate competing claims, hold leaders accountable, and make informed choices at the ballot box. Recent comparative studies further confirm that knowledge disparities persist, especially in societies undergoing rapid institutional changes or facing volatile party systems, which often exacerbate knowledge inequalities (Sindermann et al., 2022; Stiers & Dassonneville, 2024). In Malaysia and across Southeast Asia, these concerns are particularly salient in the context of Undi18 reforms, which enfranchised younger voters at an earlier age, raising pressing questions about whether first-time voters possess the political knowledge required to participate effectively (Saidin & Azrun, 2025).

Over the past decades, scholars have attempted to conceptualize and measure political knowledge in diverse ways. The most widely accepted view defines political knowledge as “holding correct information about politics,” encompassing facts about institutions, actors, and policies (Luskin, 1987; Mondak, 2000). Others broaden this understanding by situating political knowledge within the larger construct of political sophistication, which emphasizes the organization, depth, and connectedness of information (Jeffrey J. Mondak, 2001). More recent contributions further expand the construct, highlighting that political knowledge should not be seen as static factual recall, but as a relational and functional resource that individuals use in navigating political and institutional environments (Anderson, 2025).

Despite these advancements, several limitations remain. Much of the existing literature is heavily U.S. and Europe-centric, with limited attention given to youth in developing democracies such as Malaysia. This geographic bias has contributed to a lack of empirical evidence on first-time voters in Southeast Asia, particularly in relation to the newly enfranchised Undi18 electorate (Siang Ling & Puyok, 2024). Furthermore, studies often assume relatively stable institutional contexts, overlooking the ways in which institutional volatility or rapidly changing political systems may affect what counts as ‘knowledge’ or how it should be measured. Additionally, prior measures have struggled to distinguish between partial knowledge and complete ignorance, thus limiting the robustness of conclusions about citizens’ cognitive capacity to participate in politics.

In recent years (2020–2025), methodological innovations have sought to address some of these challenges. New approaches disentangle knowledge ability from response behavior, using latent trait and response-tree models that better account for guessing, non-response, and metacognitive awareness of ‘not knowing’ (Van Erkel & Van Aelst, 2020). Cross-national comparative studies now integrate institutional change and political instability as key variables affecting knowledge (Stiers & Dassonneville, 2024). At the same time, scholars are increasingly calling for definitions of political knowledge that recognize not only factual correctness but also the critical and evaluative capacities of individuals in processing information, particularly in the digital era. These advances point to a reconceptualization of political knowledge as a dynamic, multidimensional, and context-sensitive construct.

Taken together, the literature demonstrates that while political knowledge is indispensable to democratic participation, its definition and measurement require constant refinement. There is clear evidence that the problem exists, significant theoretical and methodological progress has been made, but notable research gaps remain particularly regarding first-time voters in emerging democracies and the role of digital media in shaping knowledge acquisition. Building on recent methodological innovations, a robust definition of political knowledge must go beyond static fact recall to encompass accuracy, breadth, structural connectedness, evaluative capacity, and adaptability to institutional and informational change. This study positions itself within this evolving tradition, aiming to contribute new empirical insights on the conceptualization and measurement of political knowledge in the Malaysian context of Undi18.

This study introduces a new approach to measuring political knowledge among first-time voters by focusing on three critical dimensions: democracy information, election information, and political party information. While global research often emphasizes general knowledge or media influence, these core elements remain underexplored, particularly in Malaysia’s Undi18 context. By developing and validating a context-specific instrument, this study provides both methodological and practical contributions. It enables accurate assessment of first-time voters’ readiness, informs targeted civic education, and strengthens democratic participation, thereby addressing a pressing gap in both national and comparative research.

METHODOLOGY

The development of the Political Knowledge Questionnaire for first-time voters in Malaysia followed a systematic multi-stage process. First, the instrument was adapted and adopted from previous studies in political communication and youth voting behaviour, ensuring that the items reflected both established constructs and the local Undi18 context. Building on this foundation, the questionnaire was structured into three distinct constructs: Democracy Information, Election Information, and Political Party Information, each containing items that capture knowledge central to the Malaysian electoral framework.

Democracy Information

Code	Item
MD1	The Federal Constitution of Malaysia is the highest law in Malaysia.
MD2	In Malaysia, the legislative body is called Parliament, which has full authority to enact national laws.
MD3	Malaysia practices a constitutional monarchy with the Yang di-Pertuan Agong as the Head of State.
MD4	In Malaysia, Parliament is the highest legislative institution in the country that enacts laws.
MD5	The Malaysian Parliament consists of the Yang di-Pertuan Agong, the Senate (Dewan Negara), and the House of Representatives (Dewan Rakyat).
MD6	The House of Representatives (Dewan Rakyat) consists of 222 Members of Parliament, determined during the general election.

Election Information

Code	Item
MPi1	Malaysia practices the simple majority electoral system in which the winner is determined by the highest number of votes among the competing candidates.
MPi2	The voting age in Malaysia has been lowered from 21 years to 18 years.
MPi3	Voter registration for those aged 18 and above is automatic.
MPi4	A General Election is held when Parliament or a State Legislative Assembly is dissolved or automatically dissolved after five years.
MPi5	A by-election is held to fill a vacancy in Parliament or a State Legislative Assembly due to death or resignation.
MPi6	In Malaysia, general elections are held once every five years to elect representatives to Parliament.
MPi7	In Malaysia, State Elections are held once every five years to elect representatives to the State Legislative Assemblies.

Political Party Information

Code	Item
MPP1	Barisan Nasional (BN) Component Party.
MPP2	Pakatan Harapan (PH) Component Party.
MPP3	United Malays National Organisation (UMNO) is a component party of BN.
MPP4	Malaysian Chinese Association (MCA) is a component party of BN.
MPP5	Malaysian Indian Congress (MIC) is a component party of BN.
MPP6	People's Justice Party (PKR) is a component party of PH.
MPP7	Democratic Action Party (DAP) is a component party of PH.
MPP8	Malaysian United Democratic Alliance (MUDA) is a component party of PH.

To establish validity, an expert review process was conducted using the Survey/Interview Validation Rubric (VREP) form. Experts in political communication, electoral studies, and measurement were consulted to assess the clarity, relevance, and cultural appropriateness of items. Feedback from this phase informed the first refinement process, where redundant or ambiguous items were revised. Following this, a face validity assessment was carried out with a small group of potential respondents to ensure that the items were easily understood and contextually appropriate. Insights from this stage led to further refinement of the instrument.

The next stage involved a pilot test (N=60), during which the internal consistency of the constructs was evaluated through Cronbach's alpha, yielding coefficients above the acceptable threshold and thereby confirming initial reliability.

Construct	Item	Pilot Test (N=60) (Alpha Coefficient)	Item	Actual (N=547) (Alpha Coefficient)
Political Knowledge Structure	MD1–MD7	.728	MD1–MD7	.924
	MPi1–MPi7	.842	MPi1–MPi7	.926
	MPP1–MPP8	.940	MPP1–MPP8	.939

The results demonstrated that Political Party Information exhibited the highest reliability (.940), suggesting that respondents showed consistent understanding and interpretation of items related to party structures and affiliations. Election Information also displayed strong internal consistency (.842), reflecting stable measurement of knowledge about Malaysia’s electoral processes. Meanwhile, Democracy Information, although slightly lower at .728, still met the acceptable standard, confirming that items within this construct reliably captured foundational knowledge of Malaysia’s democratic system.

Following refinement and validation processes, the instrument was administered to the larger sample (N=547), where reliability coefficients increased substantially across all constructs—.924 (Democracy Information), .926 (Election Information), and .939 (Political Party Information). This improvement underscores the robustness of the final measurement model, suggesting that item revisions and factor validation enhanced clarity and internal consistency.

RESULTS AND DISCUSSION

The measurement model was tested using Confirmatory Factor Analysis (CFA) in AMOS to assess the construct validity of the proposed three-dimensional Political Knowledge Questionnaire. The model specified three latent constructs; Democracy Information (MD), Election Information (MPi), and Political Party Information (MPP) each measured by their respective observed indicators. The analysis aimed to evaluate factor loadings, inter-construct correlations, and the overall model fit.

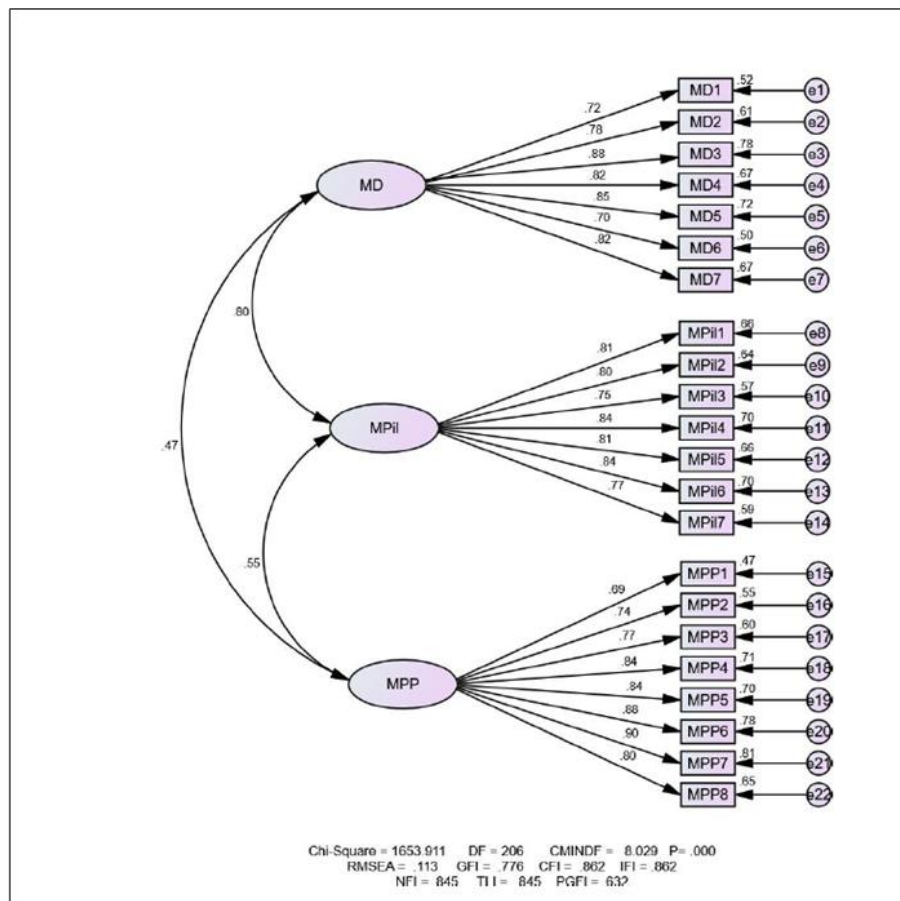


Figure 1 Initial model of political knowledge

Factor Loadings

All 22 observed items loaded significantly onto their designated latent constructs, with standardized factor loadings exceeding the recommended threshold of .70. Specifically, the Democracy Information (MD) items (MD1–MD7) exhibited loadings ranging from .70 to .88, indicating that each item reliably represented the underlying construct. Similarly, Election Information (MPi) items (MPi1–MPi7) demonstrated loadings between .71 and .84, reflecting strong convergent validity. The Political Party Information (MPP) items (MPP1–MPP8) showed equally robust loadings, ranging from .74 to .89. These results suggest that the measurement items for each construct possess satisfactory internal consistency and adequately capture their intended dimensions.

Inter-Construct Correlations

The latent constructs were moderately to strongly correlated. The correlation between Democracy Information and Election Information was particularly high at .80, suggesting that these constructs are closely related and may represent overlapping aspects of institutional knowledge. The correlation between Democracy Information and Political Party Information was more moderate at .47, while Election Information and Political Party Information correlated at .55. These values indicate meaningful relationships among the three constructs, while still maintaining sufficient distinction to support discriminant validity. However, the high correlation between Democracy Information and Election Information suggests the possibility of a higher-order factor capturing institutional knowledge.

Model Fit Indices

The overall fit of the measurement model was assessed using multiple indices. The Chi-Square statistic was significant, $\chi^2(206) = 1653.911$, $p < .001$, as is common with large samples. The CMIN/DF value of 8.029 exceeded the recommended threshold of 5, suggesting a poor fit. Similarly, the RMSEA value of .113 indicated poor model fit, as acceptable values should be below .08, with values under .06 considered ideal. Incremental fit indices also fell below recommended levels: GFI = .776, CFI = .862, IFI = .862, NFI = .845, TLI = .845. All values are below the commonly accepted cutoff of .90, indicating that while the model provides some explanatory value, it does not meet the rigorous standards for good model fit. The PGFI value of .632 suggests moderate parsimony in the model.

Interpretation

The findings reveal both strengths and limitations of the current measurement model. The strong and significant factor loadings confirm that the observed indicators reliably measure their respective constructs, providing evidence of convergent validity. The inter-construct correlations further validate that the three dimensions of political knowledge, namely democratic institutions, electoral processes, and political parties, are conceptually related yet empirically distinct.

However, the overall model fit indices indicate that further refinement is needed. The high correlation between Democracy Information and Election Information suggests conceptual overlap, possibly reflecting a broader construct of Institutional Political Knowledge. The RMSEA and incremental fit indices indicate suboptimal model fit, suggesting that structural adjustments such as correlating theoretically related error terms or revising redundant items may enhance model performance. These findings imply that Malaysian first-time voters may view institutional and electoral knowledge as interconnected components of their political understanding, underscoring the need for continued refinement of the measurement structure.

Following the evaluation of the initial measurement model, modifications were undertaken to improve overall model fit and to refine the Political Knowledge Questionnaire. This process involved examining modification indices and factor loadings to identify weak or redundant items. As a result, three items were removed: MD2 from Democracy Information, and MPi1 and MPi3 from Election Information. The revised model retained a total of 20 items across three constructs: Democracy Information (6 items), Election Information (6 items), and Political Party Information (8 items).

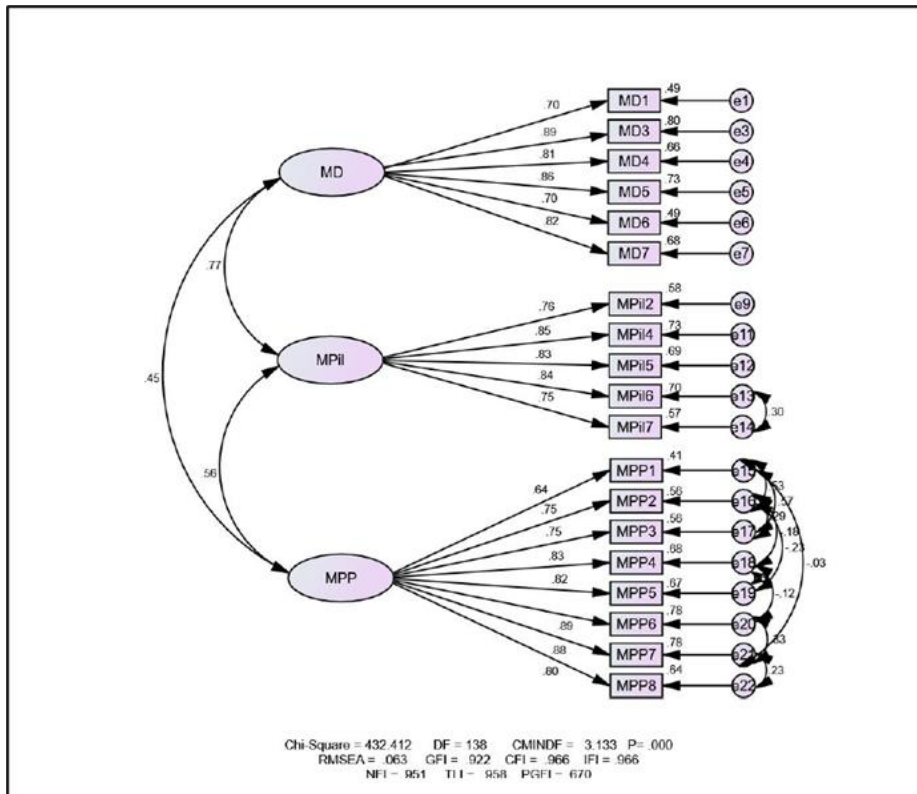


Figure 2 Modified model of political knowledge

Factor Loadings

In the modified model, all retained items loaded strongly and significantly onto their designated latent constructs. Democracy Information (MD) items (MD1, MD3–MD7) demonstrated loadings between .70 and .89, indicating high reliability. Election Information (MPII) items (MPII2, MPII4–MPII7) produced loadings ranging from .75 to .85, well above the .70 threshold. Political Party Information (MPP) items (MPP1–MPP8) retained strong loadings between .64 and .89, confirming their contribution to the latent construct. These results establish robust convergent validity across all three factors, reflecting that each indicator reliably captures its underlying dimension of political knowledge.

Inter-Construct Correlations

The relationships among the three constructs remained meaningful in the revised model. Democracy Information and Election Information exhibited a high correlation of .77, confirming their conceptual closeness as dimensions of institutional knowledge. However, the correlation was slightly reduced compared to the original model, suggesting improved discriminant validity. The correlation between Democracy Information and Political Party Information was .45, while Election Information and Political Party Information correlated at .56. These moderate associations highlight that while the constructs are related, they remain sufficiently distinct to justify separate measurement.

Model Fit Indices

The revised model demonstrated a substantial improvement in fit compared to the initial model. The Chi-Square statistic was significant, $\chi^2(138) = 432.412$, $p < .001$, though this outcome is expected with large samples. More importantly, incremental and absolute fit indices improved considerably. The CMIN/DF value of 3.133 fell within the acceptable range (< 5), indicating satisfactory model parsimony. The RMSEA value of .063 indicated a good fit, well below the maximum recommended threshold of .08. Incremental indices confirmed strong fit, with GFI = .922, CFI = .966, IFI = .966, NFI = .951, and TLI = .958. All values exceeded the conventional cutoff of .90, with most surpassing the more stringent .95 benchmark. The PGFI value of .670 further demonstrated good model parsimony. Collectively, these indices confirm that the modified measurement model achieved excellent overall fit.

Interpretation

The modification process improved the psychometric quality of the Political Knowledge Questionnaire in several key ways. First, the deletion of underperforming items increased the clarity of each construct, ensuring that the retained indicators more precisely captured their latent dimensions. Second, the refined model achieved stronger global fit indices, addressing the limitations of the initial structure. The robust factor loadings and improved discriminant validity indicate that the three-factor model provides a reliable and theoretically coherent representation of political knowledge among first-time voters. Nevertheless, the consistently high correlation between Democracy Information and Election Information suggests the possibility of a higher-order factor, such as “Institutional Political Knowledge,” which could be tested in future analyses. Such a specification may provide an even more parsimonious representation of the constructs, particularly given their conceptual overlap.

In a nutshell, the modified measurement model demonstrates that the 20-item Political Knowledge Questionnaire is both reliable and valid for assessing the political knowledge of first-time voters in Malaysia’s Undi18 context. The strong factor loadings, improved fit indices, and meaningful inter-construct relationships confirm the instrument’s robustness. By refining the model, this study not only validates a context-specific tool for Malaysian youth but also contributes methodologically to the broader literature on political knowledge measurement. The findings underscore the utility of the questionnaire for future research and provide policymakers, educators, and civil society with a scientifically grounded instrument to better understand and support the democratic engagement of Malaysia’s youngest electorate.

Critically, this study demonstrates the limitations of adopting generic international instruments without contextual adaptation. Measures such as Delli Carpini and Keeter’s (1996) factual items, Eurobarometer scales, and ICCS frameworks, while foundational, do not adequately reflect Malaysia’s coalition-based politics, multicultural electorate, or the realities of youth enfranchised under Undi18. The removal of weaker items underscores the need to tailor measurement tools to account for national contexts and political reforms. By refining the structure of the questionnaire, this research addresses a longstanding gap in Malaysian political communication scholarship, ensuring that the measurement of political knowledge is both theoretically rigorous and empirically relevant.

Conceptually, the high correlation between Democracy Information and Election Information suggests the potential existence of a higher-order construct: Institutional Political Knowledge. Future studies could test hierarchical models that capture this overlap more parsimoniously while preserving the distinction between institutional and partisan knowledge. Importantly, the findings affirm that political knowledge is not merely an academic construct but a vital determinant of political participation readiness, particularly for first-time voters.

POLICY RECOMMENDATIONS

The validated questionnaire has direct implications for policy and practice. For the Ministry of Education (MOE), the instrument can serve as a diagnostic tool to evaluate the effectiveness of civic education curricula in secondary schools and pre-university programs. By identifying specific deficits in Democracy, Election, or Party Information, educators can design targeted modules to strengthen factual knowledge and critical engagement with political processes. For the Election Commission (EC), the questionnaire can inform voter education campaigns tailored to Undi18 voters. For example, interventions could focus on clarifying electoral procedures and institutional roles, thereby reducing confusion and building trust in democratic processes. Moving from measurement to action, the study underscores the importance of coordinated national strategies. The Ministry of Education should institutionalize compulsory media education to improve literacy and critical decision-making. The Ministry of Youth & Sports Malaysia must recognize the influence of social media influencers (SMIs) to mobilize political interest among digital-native youth. Meanwhile, federal and state governments have a vital role in promoting informal political talk and structured exposure to political content through social media to bridge knowledge gaps and foster deliberation. Together with youth-led civic education initiatives, these actors can boost first-time voters’ readiness for informed participation. In conclusion, this study contributes both methodologically and substantively, ensuring that Undi18 is not only about legal enfranchisement but about cultivating a generation of voters empowered to participate meaningfully in Malaysia’s democratic future.

CONCLUSION

This study set out to develop and validate a Political Knowledge Questionnaire tailored to the Malaysian context of the Undi18 reform. The findings demonstrate that political knowledge among first-time voters can be meaningfully assessed across three interconnected domains: Democracy Information, Election Information, and Political Party Information. By confirming a reliable and valid measurement model, this research addresses a pressing methodological gap and provides one of the first tools designed specifically for Malaysia's youngest electorate. The implications are threefold. First, political knowledge is multidimensional rather than uniform, requiring nuanced operationalization. The strong loadings and acceptable fit indices confirm the robustness of the modified model, while the removal of weaker items underscores the need for contextual adaptation. Second, theoretical contributions emerge from the interaction between institutional and partisan knowledge, opening new avenues for examining higher-order constructs of political knowledge. Third, the validated questionnaire offers a practical diagnostic tool for policymakers, educators, and civil society actors to design interventions that enhance first time voters political knowledge for political participation readiness.

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