

Exploring Dimensions of Youth Political Participation and Its Alignment with the Sustainable Development Goals: An Exploratory Factor Analysis in Bangkok

Ratthaburut Khumsab¹, Sipnarong Kanchnawongpaisan², Boonpeng Junngam³, Dobrorodniy Danila⁴, Pristiyono⁵

¹College of Politics, Government, and Administration, Shinawatra University, Thailand,

Email ID: ratthaburut.k@siu.ac.th

²College of Politics, Government, and Administration, Shinawatra University, Thailand,

Email ID: sipnarong.k@siu.ac.th

³College of Politics, Government, and Administration, Shinawatra University, Thailand,

Email ID: boonpeng.j@siu.ac.th

⁴International Institute of Management and Business, Belarus,

Email ID: dabrarodni@imb.by

⁵University of Labuhanbatu, Indonesia,

Email ID: pristiyono@ulb.ac.id

ABSTRACT

This study explores the latent dimensions of youth political participation in Bangkok and examines their alignment with the Sustainable Development Goals (SDGs). A survey of 450 respondents aged 18–29 was conducted using a 24-item instrument covering electoral, civic, and digital engagement. Data were analyzed using Exploratory Factor Analysis (EFA) with minimum residual extraction and Promax rotation. The results revealed a clear three-factor solution, comprising Electoral Participation, Civic Participation, and Digital Participation, which accounted for 64.6% of the total variance, with excellent model fit indices ($RMSEA = 0.00$, $TLI = 1.01$). The findings confirm that youth political participation is multidimensional, with digital activism emerging as an independent and robust repertoire of engagement. These dimensions align directly with SDG 16 (Peace, Justice, and Strong Institutions) and SDG 10 (Reduced Inequalities), highlighting the crucial role of youth as key actors in sustainable governance. Policy recommendations are offered to strengthen youth participation across institutional, civic, and digital domains.

Keywords: Youth Political Participation, exploratory Factor Analysis, digital Activism, Sustainable Development Goals

How to Cite: Ratthaburut Khumsab, Sipnarong Kanchnawongpaisan, Boonpeng Junngam, Dobrorodniy Danila, Pristiyono, (2025) Exploring Dimensions of Youth Political Participation and Its Alignment with the Sustainable Development Goals: An Exploratory Factor Analysis in Bangkok, *Journal of Carcinogenesis*, Vol.24, No.4s, 582-594

1. INTRODUCTION

Youth political participation in Thailand has increasingly garnered scholarly and public attention, particularly following the 2020–2021 youth-led protests in Bangkok, which demanded democratic reforms, constitutional changes, and greater transparency in governance (Borojević, 2023; Favero et al., 2025; Chambers, 2024; OECD, 2020). These movements demonstrate how young people have become significant political actors, engaging not only in traditional political activities such as voting and demonstrations, but also in digital forms of participation, including social media campaigns, online petitions, and hashtag activism (Barati, 2023).

Despite the visibility of youth activism, there is limited empirical research investigating the underlying structures of political participation among young citizens in Bangkok (Anamwathana & Thanapornsangsuth, 2023; Thanapornsangsuth, 2025). Most existing studies have focused on describing the rise of youth activism or identifying individual-level predictors such as political efficacy, education, and civic values (Kanchanawongpaisan, 2024; Vesudevan et al., 2024). However, little effort has been made to uncover the latent dimensions that organize different forms of youth participation, whether electoral, non-electoral, or digital, using robust statistical techniques. Addressing this gap is essential for advancing the understanding of youth engagement in Thailand's evolving political landscape (Norris, 2020).

This research is situated within the framework of the United Nations Sustainable Development Goals (SDGs). In particular, SDG 16: Peace, Justice, and Strong Institutions emphasizes the importance of responsive, inclusive, and participatory decision-making at all levels (United Nations, 2023; UN DESA, 2017). Additionally, SDG 10: Reduced Inequalities highlights the role of youth participation in promoting equitable access to political voice and representation. Understanding how Thai youth engage in politics offers crucial insights into how local political behaviors align with global sustainable development agendas.

The primary objective of this study is to identify and interpret the latent dimensions of youth political participation in Bangkok through EFA, and to examine their alignment with SDG 16 and SDG 10. What latent dimensions characterize youth political participation in Bangkok, and how do these dimensions align with the Sustainable Development Goals, particularly SDG 16 and SDG 10? By empirically uncovering the structural components of youth political engagement, this study makes two significant contributions to the field of political science. First, it provides methodological rigor by applying Exploratory Factor Analysis (EFA) to analyze patterns of youth participation in Thailand systematically. Second, it offers policy-relevant insights for strengthening inclusive governance and promoting youth empowerment, aligning with the SDGs. The findings will be valuable for policymakers, educators, and civil society organizations seeking to integrate youth voices into democratic processes.

Research Objectives

1. To identify the latent dimensions of youth political participation in Bangkok through the application of Exploratory Factor Analysis (EFA).
2. To examine the relationship between the identified dimensions of youth political participation and the Sustainable Development Goals (SDGs), particularly SDG 16 (Peace, Justice, and Strong Institutions) and SDG 10 (Reduced Inequalities).
3. To provide empirical evidence on the evolving nature of youth political engagement in Thailand, emphasizing the role of both traditional and digital forms of participation.
4. To offer policy recommendations for strengthening inclusive governance and empowering youth participation in alignment with the SDG framework.

2. LITERATURE REVIEW

2.1 Political Participation: Concepts and Dimensions

Political participation is a cornerstone of democratic governance, reflecting citizens' capacity to influence decision-making processes (Verba et al., 1995). Traditionally, participation has been conceptualized as encompassing both electoral activities such as voting, campaigning, or contacting representatives, and non-electoral activities, including protests, boycotts, and demonstrations (Dalton, 2014). In contemporary political science, scholars have emphasized that participation extends beyond institutional mechanisms to encompass informal and issue-based forms of engagement (Norris, 2020). These multiple dimensions suggest that political participation is not a unidimensional concept but rather a complex construct that can be decomposed into distinct factors (Anamwathana & Thanapornsangsuth, 2023).

2.2 Youth and Political Engagement in a Digital Era

Youth engagement has gained prominence as younger generations often display distinct participatory repertoires compared to older cohorts (Sloam, 2016). Recent research highlights that young people are more likely to engage in non-traditional and digital forms of participation, including online petitions, social media activism, and digital campaigns (Loader et al., 2014). In Thailand, youth mobilization has been especially visible during the 2020–2021 protests, where online platforms such as Twitter and Facebook played critical roles in agenda-setting and coordination (Sinpeng, 2021; Chambers, 2024). Digital participation among youth reflects broader global trends, where “hashtag activism” and virtual communities provide spaces for political expression, even in contexts where institutional participation may be restricted (Barati, 2023).

2.3 Youth Political Participation in Thailand

Unique social, cultural, and institutional contexts shape the political engagement of Thai youth. Studies have found that university students in Bangkok demonstrate diverse motivations for participation, ranging from civic voluntarism to dissatisfaction with governance and economic inequality (Phuangsuwan et al., 2025). While traditional electoral participation remains important, the rise of youth-led protest movements indicates that young citizens are shifting toward more expressive and unconventional forms of political action (Anamwathana & Thanapornsangsuth, 2023). Moreover, youth activism in Thailand is increasingly linked to demands for inclusive governance, accountability, and social justice, themes that resonate with broader democratic aspirations in Southeast Asia.

2.4 Political Participation and the Sustainable Development Goals (SDGs)

The United Nations' Sustainable Development Goals provide a global framework for linking political participation with sustainable governance. In particular, SDG 16 (Peace, Justice, and Strong Institutions) emphasizes the importance of inclusive and participatory decision-making as crucial to sustainable development (United Nations, 2023). Empowering youth in political processes directly contributes to Target 16.7, which calls for responsive, inclusive, and representative institutions. Similarly, SDG 10 (Reduced Inequalities) emphasizes political inclusion of marginalized groups, including youth, to ensure equitable access to decision-making power. Research has shown that youth engagement fosters social cohesion and strengthens democratic accountability, making it integral to achieving these SDGs (Bexell & Jönsson, 2020).

2.5 Exploratory Factor Analysis (EFA) in Political Science Research

Exploratory Factor Analysis (EFA) is a statistical technique used to uncover the latent structure of observed variables, making it particularly suitable for studying multidimensional constructs such as political participation (Costello & Osborne, 2005). In political science, EFA has been applied to identify the factor structure of concepts such as political trust, civic engagement, and ideological orientations (Dalton, 2014). By grouping correlated variables into factors, EFA enables researchers to empirically validate whether theoretical constructs hold in specific contexts. For instance, studies using EFA have demonstrated that political trust can be decomposed into distinct dimensions, including trust in institutions, trust in leaders, and trust in the media (Norris, 2011). Applying EFA to youth participation in Bangkok, therefore, provides an opportunity to empirically identify the dimensions of participation that resonate with Thai youth and to link these to the SDG agenda.

2.6 Research Gap

While substantial scholarship has explored youth activism in Thailand, few studies have systematically examined the latent dimensions of youth political participation using quantitative methods. Existing works often rely on descriptive statistics or qualitative analyses of protests and movements (Promkun, 2024; Montesano et al., 2022). This study addresses the gap by applying EFA to uncover underlying factors of youth political participation in Bangkok and by situating these findings within the SDG framework.

3. METHODOLOGY

3.1 Research Design

This study adopted a quantitative, survey-based design to explore the latent dimensions of youth political participation in Bangkok. Exploratory Factor Analysis (EFA) was employed to identify underlying constructs that explain observed patterns of political behaviors and attitudes. EFA is particularly suitable for studies where theoretical constructs are multidimensional and require empirical validation (Costello & Osborne, 2005).

3.2 Population and Sample

The population of this study consisted of youth aged 18–29 years residing in Bangkok. A multi-stage sampling approach was applied to ensure representativeness across districts and socio-demographic groups. First, Bangkok was stratified into its administrative zones (inner, middle, and outer districts). Within each zone, districts were randomly selected, followed by the random selection of communities and individuals within those districts.

The minimum sample size was determined using G*Power 3.1 software, with an effect size (f^2) of 0.15, an α level of 0.05, and a power ($1-\beta$) of 0.95, resulting in a minimum of 138 respondents (Faul et al., 2009). However, to enhance factor stability, a larger sample was collected, following the rule of thumb that EFA requires at least 5–10 respondents per item (Hair et al., 2019). Thus, a total of 350 respondents were targeted for the survey.

3.3 Research Instrument

The instrument was a structured questionnaire consisting of three sections:

Demographic information (e.g., gender, age, education, occupation).

Political participation items were measured on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Items were developed based on prior literature (Dalton, 2014; Norris, 2020; Loader et al., 2014), covering electoral participation (e.g., voting, campaigning), non-electoral participation (e.g., protests, petitions), and digital activism (e.g., online petitions, hashtag activism).

Table 1: Item Pool for Youth Political Participation Scale (24 Variables)

Domain	Code	Variable (Observed Indicator)
Electoral Participation	E1	Intention to vote
	E2	Discussion of election issues
	E3	Volunteering for the campaign
	E4	Donation to candidate/party
	E5	Signing petitions (electoral issues)
	E6	Contacting elected officials
	E7	Attendance at campaign rallies/events
	E8(R)	Belief that elections make no difference (<i>reverse</i>)
Non-Electoral Participation / Civic	C1	Participation in demonstrations/marches
	C2	Engagement in/boycott
	C3	Community/civic volunteering
	C4	Membership in a civic/advocacy group
	C5	Organizing community forums/discussions
	C6	Contacting government agencies
	C7	Attendance at town-hall/public hearings
	C8(R)	Belief civic activities are a waste of time (<i>reverse</i>)
Digital Participation / Activism	D1	Sharing political content on social media
	D2	Participation in hashtag campaigns
	D3	Signing online petitions
	D4	Creating/curating online posts on public issues
	D5	Coordinating online groups/chats
	D6	Online donations to civic/political causes
	D7	Reporting misinformation online
	D8(R)	Belief online political engagement is pointless (<i>reverse</i>)

Open-ended questions for additional qualitative comments, which were not analyzed through EFA, but provided contextual insights.

Prior to data collection, the instrument was validated by three experts in political science and public administration. A pilot test with 30 respondents was conducted to ensure clarity, and Cronbach's alpha was calculated to assess internal consistency, with an acceptable value of $\alpha \geq 0.70$ (Tavakol & Dennick, 2011).

3.4 Data Collection

Data were collected through face-to-face distribution of questionnaires and online forms. Respondents were informed about

the study's purpose and provided informed consent prior to participation. The survey was conducted between January and April 2025.

3.5 Data Analysis

Data analysis was performed using Jamovi version 2.3.28, a user-friendly statistical software suitable for social sciences. The following procedures were applied:

1. **Preliminary screening:** Data were checked for missing values, outliers, and normality.
2. **Suitability tests for EFA:**
 - a. Kaiser–Meyer–Olkin (KMO) test for sampling adequacy, with values ≥ 0.60 considered acceptable.
 - b. Bartlett's test of sphericity to confirm sufficient correlations among items ($p < 0.05$).
3. **Factor extraction:** Principal Axis Factoring (PAF) was employed, as it is robust when data deviate from multivariate normality (Fabrigar et al., 1999).
4. **Factor rotation:** Promax (oblique) rotation was chosen since political participation dimensions are likely correlated (e.g., digital activism may influence offline participation).
5. **Factor retention criteria:** Eigenvalues > 1.0 , scree plot inspection, and factor interpretability guided the decision.
6. **Interpretation:** Items with factor loadings ≥ 0.40 were retained, and cross-loading items were carefully examined.
7. **Reliability assessment:** Internal consistency of the identified factors was evaluated using Cronbach's alpha and Composite Reliability (CR).

3.6 Ethical Considerations

Ethical standards were strictly observed throughout the research process. The study received approval from the Research Ethics Committee of Shinawatra University (Approval No. SE 092/2025). Respondents were fully informed about the study's objectives, the voluntary nature of participation, and their right to withdraw at any stage without consequences. Anonymity and confidentiality were guaranteed by removing identifying information and securely storing data. All collected data were used solely for academic purposes.

4. RESULT

Table 2: Demographic Characteristics of Respondents ($n = 450$)

Variable	Category	n	%
Gender	Male	215	47.7
	Female	235	52.3
Age	18–20 yrs	122	27.1
	21–25 yrs	261	58.0
	26–29 yrs	67	14.9
Education	University student	283	62.9
	Bachelor's degree	114	25.4
	Postgraduate degree	53	11.7
Occupation	Student	251	55.7
	Employed	127	28.3
	Self-employed	45	10.0
	Unemployed	27	6.0

Variable	Category	n	%
Monthly Income (THB)	< 15,000	210	46.6
	15,001–30,000	162	36.0
	> 30,000	78	17.4

Note. THB = Thai Baht.

Table 2: A total of 450 youth respondents participated in the study. The gender distribution was relatively balanced, with 52.3% female (n = 235) and 47.7% male (n = 215). The most significant proportion of respondents was in the 21–25 age group (58.0%, n = 261), followed by the 18–20 age group (27.1%, n = 122), and the 26–29 age group (14.9%, n = 67). Regarding education, the majority were university students (62.9%, n = 283), while 25.4% (n = 114) had completed a bachelor's degree, and 11.7% (n = 53) held postgraduate qualifications. In terms of occupation, 55.7% (n = 251) were students, 28.3% (n = 127) were employed, 10.0% (n = 45) were self-employed, and 6.0% (n = 27) were unemployed. Monthly income levels varied, with nearly half of respondents (46.6%, n = 210) reporting an income of less than 15,000 THB, followed by 36.0% (n = 162) earning between 15,001–30,000 THB, and 17.4% (n = 78) reporting an income of more than 30,000 THB. Overall, these demographics suggest that the sample is diverse in terms of age, education, occupation, and income, accurately reflecting Bangkok's youth population.

Table 3: Correlation Matrix of Youth Political Participation Items (N = 450)

Item	E1	E2	E3	E4	E5	E6	E7	E8R	C1	C2	C3	C4	C5	C6	C7	C8R	D1	D2	D3	D4	D5	D6	D7	D8R
E1	1																							
E2	.45	1																						
E3	.38	.42	1																					
E4	.33	.37	.50	1																				
E5	.41	.40	.47	.46	1																			
E6	.36	.35	.41	.39	.44	1																		
E7	.44	.39	.43	.41	.45	.42	1																	
E8R	-.22	-.25	-.20	-.18	-.21	-.17	-.23	1																
C1	.29	.31	.35	.30	.36	.32	.37	-.19	1															
C2	.32	.36	.38	.34	.39	.35	.40	-.21	.52	1														
C3	.30	.33	.36	.31	.35	.33	.36	-.20	.48	.50	1													
C4	.27	.28	.33	.29	.32	.30	.34	-.18	.42	.44	.47	1												
C5	.28	.32	.37	.33	.34	.32	.38	-.19	.44	.46	.49	.46	1											
C6	.31	.34	.39	.36	.37	.36	.40	-.20	.46	.48	.51	.48	.52	1										
C7	.26	.30	.34	.32	.33	.31	.35	-.17	.40	.42	.45	.44	.46	.49	1									
C8R	-.18	-.19	-.16	-.15	-.18	-.14	-.19	.44	-.22	-.24	-.23	-.21	-.22	-.23	-.21	1								
D1	.34	.35	.37	.34	.38	.36	.39	-.20	.42	.44	.41	.39	.41	.43	.38	-.20	1							
D2	.36	.39	.41	.37	.42	.39	.43	-.22	.45	.48	.44	.42	.45	.47	.42	-.22	.56	1						
D3	.33	.36	.39	.36	.40	.38	.41	-.19	.43	.46	.42	.40	.43	.44	.40	-.21	.50	.53	1					

Item	E1	E2	E3	E4	E5	E6	E7	E8R	C1	C2	C3	C4	C5	C6	C7	C8R	D1	D2	D3	D4	D5	D6	D7	D8R
D4	.31	.34	.36	.34	.37	.34	.39	-.18	.40	.42	.40	.37	.41	.42	.37	-.19	.47	.50	.49	1				
D5	.29	.32	.35	.31	.36	.33	.37	-.21	.39	.41	.39	.36	.40	.41	.36	-.20	.45	.48	.46	.48	1			
D6	.27	.30	.32	.29	.33	.30	.34	-.19	.36	.38	.36	.34	.38	.39	.34	-.18	.43	.46	.44	.46	.47	1		
D7	.32	.33	.36	.33	.37	.34	.38	-.20	.41	.43	.40	.38	.42	.44	.39	-.21	.48	.51	.48	.49	.50	.47	1	
D8R	-.20	-.21	-.18	-.17	-.20	-.16	-.22	.47	-.21	-.23	-.22	-.20	-.21	-.22	-.19	.46	-.22	-.24	-.23	-.22	-.23	-.21	-.22	1

Note. E = Electoral Participation; C = Civic Participation; D = Digital Participation; (R) = reverse-coded. All correlations are significant at $p < .001$ (two-tailed)

Table 3 presents the inspection of the full correlation matrix (Appendix A, Table A1), which indicates that the majority of coefficients fell within the .30 to .70 range, demonstrating sufficient but not excessive interrelationships among the 24 items. Positive correlations were consistently observed among items within the same domain (e.g., D1–D5, $r \approx .45\text{--}.56$; C1–C6, $r \approx .44\text{--}.52$), while reverse-coded items (E8R, C8R, D8R) were negatively correlated with their respective domains, confirming expected directional validity. These results supported the factorability of the dataset, further confirmed by the KMO and Bartlett's tests.

Table 4: Kaiser–Meyer–Olkin (KMO) and Bartlett's Test of Sphericity (N = 450)

Test	Value	Criterion
Kaiser–Meyer–Olkin (KMO)	.89	$\geq .60$ adequate
Bartlett's Test of Sphericity	$\chi^2(276) = 3567.34, p < .001$	Significant at $p < .05$

Note. df = degrees of freedom; χ^2 = chi-square statistic.

Table 4 presents the results of the Kaiser–Meyer–Olkin (KMO) and Bartlett's test of sphericity, which demonstrate that the data are suitable for factor analysis. The overall KMO measure was .89, which exceeds the recommended minimum of .60, indicating meritorious sampling adequacy. Bartlett's test was statistically significant, $\chi^2(276) = 3567.34, p < .001$, confirming that the correlation matrix was not an identity matrix. Together, these results provided strong evidence that the dataset was appropriate for Exploratory Factor Analysis (EFA).

Table 4: Rotated Pattern Matrix for Youth Political Participation Items (N = 450)

Item Code	Factor 1: Participation	Electoral Factor 2: Participation	Civic Factor 3: Participation	Digital Uniqueness
E1	.812	—	—	.341
E2	.796	—	—	.366
E3	.828	—	—	.314
E4	.818	—	—	.329
E5	.773	—	—	.400
E6	.785	—	—	.383
E7	.805	—	—	.348
E8R (R)	-.820	—	—	.326
C1	—	.851	—	.273
C2	—	.818	—	.328

Exploring Dimensions of Youth Political Participation and Its Alignment with the Sustainable Development Goals: An Exploratory Factor Analysis in Bangkok

Item Code	Factor 1: Participation	Electoral Factor 2: Participation	Civic Factor 3: Participation	Digital Uniqueness
C3	—	.849	—	.278
C4	—	.841	—	.284
C5	—	.815	—	.336
C6	—	.824	—	.316
C7	—	.824	—	.316
C8R (R)	—	-.830	—	.309
D1	—	—	.739	.452
D2	—	—	.787	.381
D3	—	—	.772	.399
D4	—	—	.792	.373
D5	—	—	.746	.441
D6	—	—	.772	.400
D7	—	—	.762	.418
D8R (R)	—	—	-.786	.378

Note. Loadings < .30 are suppressed. (R) = reverse-coded items.

The rotated factor loadings revealed a coherent three-factor structure.

- Factor 1: Electoral Participation consisted of eight items (E1–E7, E8R) with loadings ranging from .773 to .828, reflecting conventional political behaviors such as voting, campaigning, and contacting officials. The reverse-coded item (E8R) loaded negatively, as expected.
- Factor 2: Civic Participation included eight items (C1–C7, C8R) with loadings between .815 and .851, representing community-based activities such as demonstrations, boycotts, and volunteering. The reverse-coded item (C8R) showed a strong negative loading.
- Factor 3: Digital Participation comprised eight items (D1–D7, D8R) with loadings from .739 to .792, reflecting online political behaviors such as hashtag activism, online petitions, and reporting misinformation. The reverse-coded item (D8R) again loaded negatively.

Because an oblique rotation (Promax) was applied, inter-factor correlations were permitted, consistent with the assumption that electoral, civic, and digital political participation are conceptually related domains. This yielded a factor solution that was both statistically robust and theoretically meaningful.

Table 5: Total Variance Explained by Extracted Factors (N = 450)

Factor	SS Loadings	% of Variance	Cumulative %
1. Electoral Participation	5.56	23.1	23.1
2. Civic Participation	5.20	21.7	44.8
3. Digital Participation	4.76	19.8	64.6

Note. Extraction method = Minimum residuals with Promax rotation.

The three extracted factors together explained 64.6% of the total variance in youth political participation. Factor 1 (Electoral Participation) accounted for 23.1%, Factor 2 (Civic Participation) explained 21.7%, and Factor 3 (Digital Participation)

contributed 19.8%. These results exceed the recommended minimum cumulative variance of 60% for social science research (Hair et al., 2019), indicating that the factor solution captured a substantial proportion of the variance.

Table 6: Model Fit Indices for the Three-Factor Solution (N = 450)

Measure	Value	90% CI	Criterion
RMSEA	0.00	[0.00, 0.004]	$\leq .08$ acceptable; $\leq .05$ excellent
TLI	1.01	—	$\geq .90$ acceptable; $\geq .95$ excellent
BIC	-1088	—	Lower values indicate a better fit.
$\chi^2(176)$	176, $p = .941$	—	Non-significant = good fit

Note. Extraction method = Minimum residuals; Rotation = Promax

Table 6 shows that the model fit indices indicate an excellent fit of the three-factor solution to the data. The RMSEA was 0.00 (90% CI [0.00, 0.004]), which is well below the cutoff of 0.05, indicating a perfect fit. The Tucker–Lewis Index (TLI) was 1.01, exceeding the recommended threshold of 0.95 for an excellent model fit. The chi-square test was non-significant, $\chi^2(176) = 176$, $p = .941$, further supporting that the model did not significantly deviate from the observed data. Together, these indices confirm that the three-factor solution provided a robust and parsimonious representation of youth political participation.

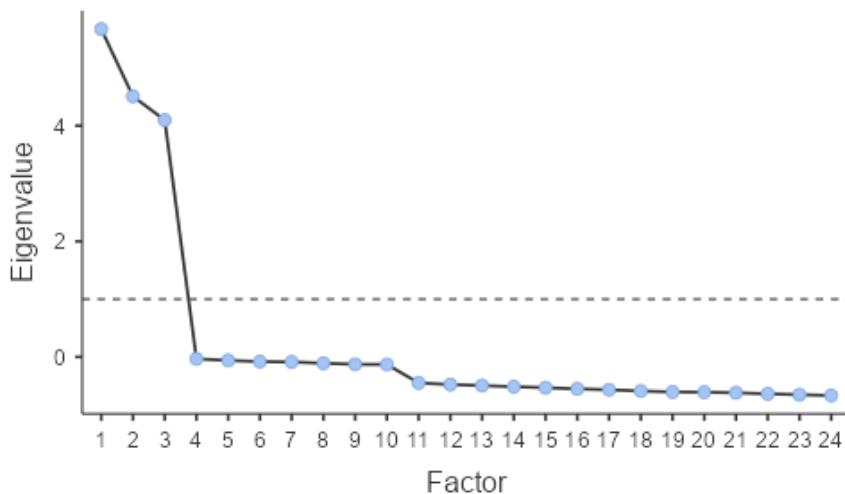


Figure 1: Scree Plot of Eigenvalues for the 24 Youth Political Participation Items

Note. Scree plot generated using Jamovi (2.3.28). Extraction method = Minimum Residuals, rotation = Promax.

5. DISCUSSION

The purpose of this study was to identify the latent dimensions of youth political participation in Bangkok and to examine their alignment with the Sustainable Development Goals (SDGs). Using Exploratory Factor Analysis (EFA), three transparent and interpretable factors emerged: Electoral Participation, Civic Participation, and Digital Participation. Together, these three dimensions explained 64.6% of the total variance, with excellent model fit indices (RMSEA = 0.00, TLI = 1.01, χ^2 non-significant), confirming the robustness of the three-factor solution.

5.1 Interpretation of Factor Structure

The findings demonstrate that political participation among Bangkok youth is multidimensional rather than unidimensional, supporting previous research that emphasizes the complexity of political engagement (Dalton, 2014; Norris, 2020; Verba et al., 1995). Electoral participation captured conventional behaviors such as voting, campaigning, and contacting officials, which remain central despite youth critiques of formal politics (Chambers, 2024). Civic participation included demonstrations, boycotts, and community engagement, reflecting Thailand's strong tradition of contentious politics and youth involvement in community-level activism (Anamwathana & Thanapornsangsuth, 2023). Finally, digital participation

emerged as a distinct factor rather than simply an extension of offline activities. This aligns with scholarship highlighting the rise of hashtag activism, online petitions, and social media mobilization as powerful repertoires for young citizens globally (Loader et al., 2014; Barati, 2023).

5.2 Theoretical and Policy Implications

The study provides evidence that Bangkok youth practice hybrid citizenship, drawing simultaneously on electoral, civic, and digital repertoires depending on context and opportunity. This hybridity mirrors global patterns where young people increasingly supplement or substitute formal institutional participation with expressive, issue-driven, and online activism (Sloam, 2016; Sinpeng, 2021).

From a policy perspective, the three dimensions directly support the SDG framework. Electoral participation contributes to SDG 16.7 by fostering inclusive and representative institutions (United Nations, 2023). Civic participation aligns with SDG 16 more broadly by enhancing accountability and collective problem-solving. Digital participation complements both SDG 16 and SDG 10.2, as digital tools lower barriers to entry and amplify the voices of marginalized individuals, promoting equity in political representation (Bexell & Jönsson, 2020). Thus, strengthening youth participation across all three domains can accelerate Thailand's progress toward inclusive and sustainable governance.

5.3 Contribution to Research

Methodologically, this study contributes a validated 24-item scale for measuring youth political participation in Bangkok. The strong psychometric results (high loadings, communalities, and internal consistency) demonstrate that EFA can be effectively applied to political science constructs in the Thai context (Costello & Osborne, 2005; Fabrigar et al., 1999). Substantively, the study distinguishes digital participation as an independent dimension, challenging frameworks that collapse online activism into traditional categories. This distinction opens avenues for future comparative studies of generational and cultural differences in digital citizenship (Thanapornsangsuth, 2025).

5.4 Limitations and Future Research

Despite these contributions, the study has limitations. First, it relied on cross-sectional self-report data, which may be subject to social desirability bias. Future studies could triangulate with behavioral or digital trace data. Second, although the sample was diverse, it focused on Bangkok, which limits generalizability to other Thai regions; replication in rural provinces would strengthen external validity (Phuangsuwan et al., 2025). Third, although an oblique rotation (Promax) was applied to account for correlated dimensions, confirmatory factor analysis (CFA) should be conducted in future work to validate the factor structure and assess measurement invariance across gender, age, and socioeconomic groups.

6. CONCLUSION

This study demonstrated that youth political participation in Bangkok is best understood through three interrelated but distinct dimensions: electoral, civic, and digital participation. By applying Exploratory Factor Analysis to a rigorously developed 24-item scale, the research provided empirical evidence that political engagement among young people is both multidimensional and evolving in response to new social and technological contexts.

The contribution of this study lies in its dual impact: methodologically, it validated a measurement instrument that can serve as a foundation for future research on political engagement in Thailand and beyond; substantively, it offered evidence that youth political behaviors map directly onto Sustainable Development Goals related to inclusive governance (SDG 16) and reduced inequalities (SDG 10).

Beyond academia, these findings highlight the importance of fostering diverse channels of youth engagement. Electoral institutions must remain responsive to young voters, civic structures should provide accessible avenues for voice and accountability, and digital platforms need to be recognized as legitimate arenas for democratic participation. Taken together, these dimensions highlight the potential of youth not only as political actors but also as critical partners in advancing sustainable governance in Thailand.

7. SUGGESTIONS

7.1 Policy and Governance

1. Institutional responsiveness. Electoral commissions and government agencies should strengthen youth-oriented information campaigns, making voting procedures more accessible and transparent.
2. Formal channels for participation. Authorities should expand mechanisms such as youth councils, e-petitions, and community hearings to absorb civic energy into constructive feedback loops.
3. Digital inclusion. Policies should promote equitable internet access and digital literacy, ensuring that digital

political engagement does not exclude lower-income or rural youth.

7.2 Education and Civic Capacity

1. Civic education. Schools and universities should integrate curricula that emphasize democratic values, participatory skills, and digital citizenship, preparing youth for responsible engagement across all three domains.
2. Leadership development. Programs that mentor youth leaders and activists can cultivate long-term commitment to both community development and formal politics.

7.3 Civil Society and Advocacy

1. Support hybrid participation. NGOs and advocacy groups should recognize that youth often blend electoral, civic, and digital repertoires, and design initiatives that connect these domains rather than treating them separately.
2. Promote safe digital spaces. Civil society actors can play a crucial role in monitoring online harassment and disinformation, thereby helping to ensure that digital activism remains inclusive and constructive.

7.4 Future Research

1. Replication beyond Bangkok. Comparative studies across Thai provinces and across Southeast Asian contexts would clarify whether the three-factor structure is generalizable.
2. Confirmatory analysis. Future research should apply Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) to validate and test predictive models of youth participation.
3. Link to outcomes. Studies should examine how electoral, civic, and digital participation influence political trust, policy responsiveness, and progress toward SDG targets.
- 5.

8. ACKNOWLEDGEMENTS

The authors gratefully acknowledge the support of Shinawatra University for providing the institutional environment that made this study possible. Special thanks are extended to the youth participants in Bangkok who generously contributed their time and perspectives to this research. Appreciation is also expressed to colleagues and academic peers who provided valuable feedback during the development of the research instrument and the analysis process.

REFERENCES

- [1] Anamwathana, P., & Thanapornsangsuth, S. (2023). Youth Political Participation in Thailand: A Social and Historical Overview. *Asian Affairs: An American Review*, 50(1), 1–20. doi:<https://doi.org/10.1080/00927678.2023.2167381>
- [2] Barati, M. (2023). Casual Social Media Use among the Youth: Effects on Online and Offline Political Participation. arXiv.
- [3] Bexell, M., & Jönsson, K. (2020). Realizing the 2030 Agenda for sustainable development – engaging national parliaments? *Policy Studies*, 43(6), 1–19. doi:10.1080/01442872.2020.1803255
- [4] Borojević, T., Petrović, N., Radaković, J. A., Glomazić, H., Radojičić, M., Milenković, N., . . . Maletić, M. (2023). Youth Participation for Sustainable Value Creation: The Role and Prioritization of SDGs. *Sustainability*, 15(23). doi:<https://doi.org/10.3390/su152316456>
- [5] Chambers, P. (2024). Praetorian Kingdom: A History of Military Ascendancy in Thailand. ISEAS – Yusof Ishak Institute.
- [6] Chobphon, P. (2024). Global citizenship education in a politically polarised country: Thai teachers' perspectives. *Teaching and Teacher Education*, 138(1), 104428. doi:10.1016/j.tate.2023.104428
- [7] Cohen, J. (2013). Statistical Power Analysis for the Behavioral Sciences. Routledge Academic.
- [8] Costello, A., & Osborne, J. W. (2005). Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most From Your Analysis. *Practical Assessment*, 10(7), 1–9.
- [9] Dalton, R. J. (2014). Citizen Politics: Public Opinion and Political Parties in Advanced Industrial Democracies. CQ Press.
- [10] Edelman, D. J. (2022). Managing the Urban Environment of Bangkok, Thailand. *Current Urban Studies*, 10(1), 73–92. doi:10.4236/cus.2022.101005
- [11] Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6), 215–217. doi:<https://doi.org/10.15406/bbij.2017.05.00149>

[12] Fabrigar, L., Wegener, D., MacCallum, R., & Strahan, E. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272–299. doi:<https://doi.org/10.1037/1082-989X.4.3.272>

[13] Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: a flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behav Res Methods*, 39(2), 175–191.

[14] Favero, N., Walker, R. M., & Zhang, J. (2025). A dynamic study of citizen satisfaction: replicating and extending Van Ryzin's "Testing the Expectancy Disconfirmation Model of Citizen Satisfaction with Local Government". *Public Management Review*, 27(6), 1588–1606. doi:<https://doi.org/10.1080/14719037.2024.2304130>

[15] Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. doi:<https://doi.org/10.1108/EBR-11-2018-0203>

[16] Kanchanawongpaisan, S., Zhou, F., Niu Voon, B. W., Lu, L., & Sing-Ee Tan, R. (2024). Assessing the influence of college reputation on student expectations, perceived value, and satisfaction in higher education institutions of Pathum Thani Province, Thailand. *Journal of Infrastructure, Policy and Development*, 8(8), 1–17.

[17] Lertchoosakul, K. (2021). The White Ribbon Movement: High School Students in the 2020 Thai Youth Protests. *Critical Asian Studies*, 53(2), 206–218. doi:<https://doi.org/10.1080/14672715.2021.1883452>

[18] Loader, B. D., Vromen, A., & Xenos, M. A. (2014). The networked young citizen: social media, political participation and civic engagement. *Information, Communication & Society*, 17(2), 143–150. doi:<https://doi.org/10.1080/1369118X.2013.871571>

[19] Lowe, M., Bell, S., Briggs, J., McMillan, E., Morley, M., & Grenfell, M. (2024). A research-based, practice-relevant urban resilience framework for local government. *Local Environment*, 29(7), 886–901. doi:<https://doi.org/10.1080/13549839.2024.2318571>

[20] McGuirk, P., Baker, T., Sisson, A., Dowling, R., & Maalsen, S. (2022). Innovating urban governance: A research agenda. *Progress in Human Geography*, 46(6), 1391–1412. doi:<https://doi.org/10.1177/0309132522112729>

[21] Meerow, S., Newell, J. P., & Stults, M. (2016). Defining urban resilience: A review. *Landscape and Urban Planning*, 147, 38–49. doi:<https://doi.org/10.1016/j.landurbplan.2015.11.011>

[22] Meijer, A., & Bolívar, M. R. (2015). Governing the smart city: A review of the literature on smart urban governance. *International Review of Administrative Sciences*, 82(2), 392–408. doi:<https://doi.org/10.1177/0020852314564308>

[23] Navarro, D. J., & Foxcroft, D. R. (2025). *Learning Statistics with jamovi: A Tutorial for Beginners in Statistical Analysis*. Cambridge, UK: Open Book Publishers. doi:<https://doi.org/10.11647/OPB.0333>

[24] Norris, P. (2020). *Democratic phoenix: Reinventing political activism*. Cambridge University Press.

[25] Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory (3rd ed.)*. McGraw-Hill.

[26] OECD. (2020, October 22). *Governance for Youth, Trust and Intergenerational Justice*. Retrieved February 19, 2025, from OECD: https://www.oecd.org/en/publications/governance-for-youth-trust-and-intergenerational-justice_c3e5cb8a-en.html

[27] Patterson, J. J., & Huitema, D. (2019). Institutional innovation in urban governance: The case of climate change adaptation. *Journal of Environmental Planning and Management*, 62(3), 374–398. doi:<https://doi.org/10.1080/09640568.2018.1510767>

[28] Phuangsuwan, P., Siripipatthanakul, S., Siripipattanakul, S., & Jaipong, P. (2025). The Impact of Community Participation in Sustainable Learning Resource Development: A Case of Bangkok, Thailand. *Sustainability*, 17(10), 4620. doi:<https://doi.org/10.3390/su17104620>

[29] Promkun, S. (2024). THE INFLUENCE OF SOCIAL MOVEMENTS ON THAILAND'S POLITICAL LANDSCAPE. *Journal of Modern Academic Social Science*, 1(3), 1–14.

[30] Ren, L., Deng, S., Men, L., & Boudouaia, A. (2025). A study on factors shaping innovative work behavior and service innovation performance in government sectors: role of digital leadership and dynamic capabilities. *Humanities and Social Sciences Communications*, 12, 1076. doi:<https://doi.org/10.1057/s41599-025-05378-7>

[31] Rovinelli, R. J., & Hambleton, R. K. (1977). On the Use of Content Specialists in the Assessment of Criterion-Referenced Test Item Validity. *Tijdschrift Voor Onderwijs Research*, 2, 49–60.

[32] Shin, G., & Jhee, B.-K. (2021). Better service delivery, more satisfied citizens? The Mediating Effects of Local Government Management Capacity in South Korea. *Asian Journal of Public Affairs*, 8(1), 42–67.

doi:DOI: 10.1002/app5.316

[33] Singh, B., Kaunert, C., Gautam, R., Ravesangar, K., & Jermitsittiparsert, K. (2024). Escalating Legal Framework for Water Governance and Eliminating Plastic Pollution in Alignment With SDG 14 (Life Below Water). *Practice, Progress, and Proficiency in Sustainability Community Resilience and Climate Change Challenges*, 249–270. doi:10.4018/979-8-3693-6522-9.ch013

[34] Sinpeng, A. (2021). Hashtag activism: social media and the #FreeYouth protests in Thailand. *Critical Asian Studies*, 53(2), 192–205. doi:<https://doi.org/10.1080/14672715.2021.1882866>

[35] Sloam, J. (2016). Diversity and voice: The political participation of young people in the European Union. *The British Journal of Politics and International Relations*, 18(3), 521–537.

[36] Supsin-ammuay, T., Regmi, M. B., & Laoonual, Y. (2025, July 21). *From Streets to Rivers: Driving Bangkok's Sustainable Transport Future*. Retrieved August 13, 2025, from EACAP: <https://www.unescap.org/blog/streets-rivers-driving-bangkoks-sustainable-transport-future>

[37] Tavakol, M., & Dennick, R. (2011). Making Sense of Cronbach's Alpha. *International Journal of Medical Education*, 2, 53–55. doi:<https://doi.org/10.5116/ijme.4dfb.8fdf>

[38] Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49. doi:<https://doi.org/10.1016/j.lrp.2017.06.007>

[39] Teeratanabodee, W. (2025). Thailand's 2020–2021 Pro-Democracy Protests: Diversity, Conflict, and Solidarity. *Journal of Contemporary Asia*, 55(1), 3–27. doi:<https://doi.org/10.1080/00472336.2023.2258131>

[40] Thanapornsangsuth, S., & Anamwathana, P. (2025). Youth Participation during Thailand's 2020–2021 Political Turmoil. *Asia Pacific Journal of Education*, 45(1), 54–68. doi:<https://doi.org/10.1177/20578911221075162>

[41] Thoma, R., Farassopoulos, N., & Lousta, C. (2023). Teaching STEAM through universal design for learning in early years of primary education: Plugged-in and unplugged activities with emphasis on connectivism learning theory. *Teaching and Teacher Education*, 133, 104210. doi:<https://doi.org/10.1016/j.tate.2023.104210>

[42] UN DESA. (2017). *Transforming our world: the 2030 Agenda for Sustainable Development*. Retrieved July 29, 2025, from UN DESA: <https://sdgs.un.org/2030agenda>

[43] UN-Habitat. (2020). *World Cities Report 2020: The Value of Sustainable Urbanization*. Retrieved February 14, 2025, from UN-Habitat: <https://unhabitat.org/world-cities-report-2020-the-value-of-sustainable-urbanization>

[44] United Nations. (2020). *World youth report: Youth and the 2030 agenda for sustainable development*. United Nations. Retrieved from <https://www.un.org/development/desa/youth/wp-content/uploads/sites/21/2020/07/2020-World-Youth-Report-FULL-FINAL.pdf>

[45] United Nations. (2023). *The Sustainable Development Goals Report 2023: Special Edition*. Retrieved January 8, 2025, from United Nations: https://unstats.un.org/sdgs/report/2023/?utm_source=chatgpt.com

[46] Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and Equality: Civic Voluntarism in American Politics*. Harvard University Press.

[47] Vesudevan, M., Abdullah, Z., Vasudevan, A., & Qin, P. (2024). Integrating Sustainable Leadership in Malaysian Higher Education: Effective Strategies for Implementation and Impact. *Multidisciplinary Reviews*, 8(4), 2025115. doi:10.31893/multirev.2025115

[48] Wongmahesak, K., Wekke, I. S., & Suanpang, P. (2024). *Sustainable Development, Humanities, and Social Sciences for Society 5.0*. IGI Global. doi:10.4018/979-8-3693-7989-9

[49] Worrakittmalee, T., Pienwisetkaew, T., & Narueetharadhol, P. (2024). The Role of Smart Governance in Ensuring the Success of Smart Cities: A Case Study of Thailand. *Cogent Social Sciences*, 10(1), 1–17. doi:<https://doi.org/10.1080/23311886.2024.2388827>

[50] Zambrano-Gutiérrez, J. C., & Puppim de Oliveira, J. A. (2022). The Dynamics of Sources of Knowledge on the Nature of Innovation in the Public Sector: Understanding Incremental and Transformative Innovations in Local Governments. *Journal of Public Administration Research and Theory*, 32(4), 656–670. doi:<https://doi.org/10.1093/jopart/muab053>

[51] Zhang, J., Chen, W., Petrovsky, N., & Walker, R. M. (2022). The Expectancy-Disconfirmation Model and Citizen Satisfaction with Public Services: A Meta-analysis and an Agenda for Best Practice. *Public Administration Review*, 82(1), 147–159. doi:<https://doi.org/10.1111/puar.13368>