POLITICAL AWARENESS, KNOWLEDGE, AND PARTICIPATION RELATIONSHIP USING STRUCTURAL EQUATION MODELING APPROACH

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ABSTRACT. Political participation is fundamental in consolidating democracy in which political participation influences the legitimacy of society towards the running of a government. In elections, political participation could be considered community control over a government. Therefore, modeling the factors of political participation becomes essential. This cross-sectional study investigates the relationship between political awareness, political knowledge, and political participation of individuals living in Padang, Indonesia, and participating in the general election of 2020. This study employs the structural equation modeling (SEM) approach to construct the proposed model. The stability of SEM's algorithm is checked using a reliability test. The performance of SEM and its algorithm is identified using the Bootstrap technique. The statistical tests proved that the proposed model is acceptable. This study found that political awareness has a positive and direct effect on political knowledge while political knowledge positively impacts political participation. It means that political awareness does not directly influence political participation. The political knowledge mediates it. This study suggests that individuals have to improve their public knowledge in the election to improve political participation. Meanwhile, political knowledge could be increased by improving political awareness. Indicator variables for each latent variable are also investigated in this study.

Keywords: Political awareness; Political knowledge; Political participation; structural equation modeling; Bootstrap technique.

ABSTRAK. Partisipasi politik merupakan hal yang fundamental dalam konsolidasi demokrasi dimana partisipasi politik mempengaruhi legitimasi masyarakat terhadap berjalannya suatu pemerintahan. Dalam pemilu, partisipasi politik dapat dianggap sebagai kontrol masyarakat atas jalannya pemerintahan. Oleh karena itu, pemodelan faktor-faktor partisipasi politik menjadi penting. Studi cross-sectional ini menyelidiki hubungan antara kesadaran politik, pengetahuan politik, dan partisipasi politik individu yang tinggal di Padang, Indonesia, yang berpartisipasi dalam pemilihan umum tahun 2020. Studi ini menggunakan pendekatan struktural persamaan model (SEM) untuk mengkonstruksi model. Kestabilan dari algoritma SEM diperiksa dengan menggunakan uji reliabilitas. Kinerja SEM dan algoritmanya diidentifikasi menggunakan teknik Bootstrap. Uji statistik yang dilakukan membuktikan bahwa model yang diusulkan dapat diterima. Penelitian ini menemukan bahwa kesadaran politik berpengaruh positif dan langsung terhadap pengetahuan politik sedangkan pengetahuan politik berpengaruh positif dan langsung terhadap partisipasi politik. Artinya kesadaran politik tidak secara langsung mempengaruhi partisipasi politik dengan pengetahuan politik sebagai faktor perantaranya. Penelitian ini menyarankan bahwa individu harus meningkatkan pengetahuan publik mereka dalam pemilu sehingga diharapkan dapat meningkatkan partisipasi politik. Sementara itu, pengetahuan politik dapat ditingkatkan dengan meningkatkan kesadaran politik. Variabel indikator untuk setiap variabel laten juga diteliti dalam penelitian ini.

Kata kunci: kesadaran politik; pengetahuan politik; partisipasi politik; pemodelan persamaan berstruktur; teknik bootstrap.

INTRODUCTION

Political participation is fundamental in the process of consolidating democracy (Arshad & Khurram, 2020; Widhyharto et al., 2020). Consolidation of democracy requires not only support for democracy but also a commitment to democratic norms and procedures such as political participation (Gan et al., 2017). Concerning democracy, political participation influences the legitimacy of society towards the running of a government. Scientists have long theorized that legitimacy, citizen support for the government, plays a central role in the stability of democracies (Gil de Zúñiga et al., 2014). In recent decades, scientists have measured declines in political legitimacy in advanced industrial democracies (Arshad & Khurram, 2020).

In an election, for example, the higher the level of community's political participation, the stronger the political legitimacy of elected public officials. Each community has its preferences and interests to determine its choice in the election. It could be said that the future of public officials being elected in an election depends on people's preferences as voters. Political participation in elections can also be seen as community control over a government. Therefore, it is crucial to identify the factors that could affect the political participation of an individual.

Public knowledge and participation in politics are at the core of democratic processes. The quality of citizenship and the health of the collective are preconditioned by political knowledge, and there is a positive relationship between knowledge and the act of voting (Gallego & Oberski, 2012; Büchi &

Vogler, 2017; Weinschenk et al., 2021). As shown by much empirical research, which was concerned with voting behavior, it was found that political knowledge increases the likelihood to vote (Büchi & Vogler, 2017; N. Jung et al., 2011). Besides, many studies report a positive effect of political awareness on political activities (Abdo-Katsipis, 2017; Aydın Çakır & Şekercioğlu, 2016). Others even suggest that political awareness might be the more robust predictor of unconventional political activities than political knowledge's impact (Ondercin & Jones-White, 2011). Besides that, some studies provide evidence for the simultaneous predictive value of political awareness and political knowledge on institutionalized and unconventional political activities (Gallego & Oberski, 2012; Johann, 2012). Hence, there is a need to understand better how political knowledge and awareness simultaneously impact political participation. Most researchers were constrained to examining bivariate relationships or models that included multiple predictors of participation only, without focusing on the mechanism behind political knowledge and awareness.

This study uses Structural Equation Modeling (SEM) approach as a robust method to analyze the structural equation between political awareness, knowledge, and participation. The researcher prefers this method to estimate the multiple and interrelated dependence in a single analysis. This study investigates the relationship between political awareness, knowledge, and political participation in elections. Even though many works have been done on determining Political Participation, not many works have been done on modeling this model using SEM, mainly when information on Political Awareness and Political Knowledge is considered. We draw on previous research and address some of the questions arising from the scholarly (and popular) debate about the relationship between awareness, public knowledge, and political engagement. In this study, we assess the direction of the relationship among these factors. We develop the political participation model of the Padang population using several statistical analysis methods. Research related to the political participation model in Padang, Indonesia, is essential to be investigated. The level of political participation of an individual in this city in 2020 is constant compared to the last general election in 2015, which was only around 52 percent (Rahmadi, 2020). That number is far from the national target of 77.5 percent. Moreover, the political participation of an individual in Padang has not been modeled before.

Political awareness is knowledge regarding political events, elections, parties, campaigns, and other essential issues that indicate the propensity to participate politically. Effective civic participation is unlikely to occur (Abdo-Katsipis, 2017). In this study, political awareness is operationalized as being aware of political engagement, political participation is the right and obligation, being a concern in socio-political conditions, being aware of political issues, and being felt needed.

Political knowledge is also beneficial to democracy. Accordingly, there are good reasons to consider political knowledge an essential and relevant variable. Political knowledge is a crucial predictor of political engagement, like turnout (de Vreese & Boomgaarden, 2006). The indicators used for describing political knowledge in this study are knowing about electoral law, knowing about the electoral process, knowing the meaning of the election, knowing the issues in a political campaign, and being active in updating political news.

Political participation is hypothesized as measured by four indicators, i.e., being active in political dialogue, being active to express the political aspiration, supporting the government political activities, and promoting the political process in the policy process. This hypotheses model was developed from the model that was designed by previous researchers (Büchi & Vogler, 2017; Gallego & Oberski, 2012; Reichert, 2016; Weinschenk et al., 2021). The responses of all items are in a five-point Likert scale, coded as 1 to indicate "strongly disagree," coded as two as "disagree," coded as three as "a little bit agree," coded as four as "agree" and coded as five which denote "strongly agree." Thus all indicator variables used in this study are in ordinal type.

This study assumes three model hypotheses constructed based on pieces of literature. Hypothesis 1 (H1) here assumes that political awareness positively affects political knowledge directly. Hypotheses 2 (H2) assumes that political awareness could positive impactect political participation. Hypotheses 3 (H3) assumes that political knowledge could have a positive impact directly on Political participation. Figure 1 illustrates the research model based on previous theoretical and empirical research. The response variable in this hypothesis and conceptual model is that political participation becomes an endogenous latent variable, political knowledge is a latent mediator variable, and political awareness is an exogenous latent variable.
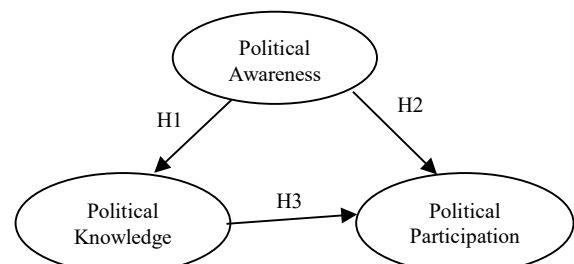

Figure 1. Conceptual Model and Hypotheses

METHODS

Political participation, political knowledge, and awareness can be measured using identified variables. These identified variables are known as latent variables. The appropriate technique for allowing the relationship among latent variables and the relationship between latent and its indicator variables is structural equation modeling (SEM) (Yanuar et al., 2013). SEM combines measurement and structural equations simultaneously. The measurement equation explains the relationship between the indicator variable to its latent variable, which is formulated as follows:

$$x_i = \Lambda \omega_i + \varepsilon_i, \qquad i = 1, \dots, n, \quad (1)$$

with x_i and ω_i are indicators and latent variables respectively, Λ refers to loading factors and ε_i is a measurement error. Meanwhile, the structural equation is the interrelationship among the latent factors and represented by :

$$\eta_i = \Gamma \xi_i + \delta_i , i = 1, \dots, n. \quad (2)$$

Let the latent variable ω_i be partitioned into (η_i, ξ_i) where η_i and ξ_i are latent variables, respectively, Γ is loading factors, and δ_i is a structural error. The estimation method for both equations is based on the Robust Weighted Least Square (RWLS) method. The indicators of goodness of fit to check the overall model fit are the root mean square error of approximation (RMSEA), comparative fit index (CFI), and Tucker Lewis index (TLI) (Yanuar et al., 2010). The formula for RMSEA, CFI and TLI are respectively:

$$RMSEA = \sqrt{max\left(\frac{\chi_M^2 - df_M}{n.df_M}, 0\right)},$$
$$TLI = 1 - \frac{\chi_M^2/df_M}{\chi_B^2/df_B},$$
$$CFI = 1 - \frac{\chi_M^2 - df_M}{\chi_B^2 - df_B}$$

With n is size sample, df_M and df_B respectively are degree of freedom for hypothesis model χ_M^2 and χ_B^2 null model, and respectively are statistical test value of χ^2 for hypothesis model and null model.

The model in SEM is hypothesized in a multidimensional construct. The multidimensional construct is a construct formed from a latent construct with several unidimensional constructs in it. The reliability of a multidimensional construct is usually estimated using the Cronbach Alpha coefficient (Cronbach, 1951). However, the reliability of the construct will be more precisely estimated with a reliability coefficient that can measure a multi-dimensional construct. The purpose of the reliability coefficient estimation is to detect the stability of SEM's algorithm. The reliability coefficient for the multidimensional construct here is calculated based on the following formulas (Yanuar et al., 2015):

a. Reliability Coefficient of Construct (CR)

$$CR = \frac{\left(\sum_{i=1}^{k} \lambda_i\right)^2}{\left(\sum_{i=1}^{k} \lambda_i\right)^2 + \left(\sum_{i=1}^{k} \delta\right)}$$

Here CR is the coefficient of reliability for Construct, λ_i is the loading factor on the i-indicator and δ is the measurement error. The value of the reliability coefficient lies between 0 to 1 and values above 0.70 are considered acceptable.

b. The reliability coefficient of McDonald Composite Score (ω)

$$\omega = \frac{\left(\sum_{i=1}^{k} \lambda_i\right)^2}{\left(\sum_{i=1}^{k} \lambda_i\right)^2 + \left(\sum_{i=1}^{k} 1 - \lambda_i^2\right)}$$

Here (ω) is the coefficient reliability of the McDonald Composite Score and λ_i is the loading factor on the-i indicator.

c. Reliability Coefficient of Weighted Constructive $((\omega))$

$$\Omega_\omega = \frac{\sum_{i=1}^{p} \frac{\lambda_i^2}{\left(1 - \lambda_i^2\right)}}{1 + \sum_{i=1}^{p} \frac{\lambda_i^2}{\left(1 - \lambda_i^2\right)}}$$

Here, Ω_ω is the coefficient of reliability of the weighted construct and λ_i is the loading factor of the indicator.

Many studies suggested using a sample size in SEM of 200 or larger (Zhang & Savalei, 2016) to fulfill the normality assumption (S. Jung, 2013). However, in reality, large sample sizes are not always possible. Much research has suggested that simplified designs can still be optimal with less than 200 observations, alluding that small samples may be possible with SEM when there are strong factor loadings (Kline, 2015). Therefore, the performance of the SEM approach and its associated algorithm in recovering the actual parameters in a moderate-size sample has to be tested. To achieve this goal, we consider the simulation study using the Bootstrap technique. In this Bootstrap method, new data set is generated by sampling with replacement from the original data set, and then estimate the statistics to each new data set (Kline, 2015; Zhang & Savalei, 2016).

There are two general kinds of bootstrapping, nonparametric bootstrapping and parametric bootstrapping (C.E. & C.J., 2011; Assaf et al., 2012; Hussin et al., 2017). While in parametric bootstrapping, the researcher specifies a theoretical probability density function then the computer generates a randomly new

data set from a particular probability density function applying the Monte Carlo simulation method. On nonparametric bootstrapping, the new data set is randomly selected with replacement from the original data set, the same number of cases as the original, then fitting the model to each new data set. When establishing new data set in the resampling process, the bootstrap does not depend on any assumption regarding the distributional form of the data set. Standard errors for a model parameter of interest are estimated as the standard deviation of a particular generated sample in the empirical sampling distribution. This present study implements the nonparametric bootstrap approach.

The process in bootstrap approximation in quick steps is as follows. Let $\{X_1, X_2, ..., X_n\}$ be a random sample of size n with the sampling distribution of parameter θ. Our estimator of θ is symbolized as. $\hat{\theta}$ Then drawn with replacement n independent bootstrap sample from original sample data, let $\{X_1^*, X_2^*, ..., X_n^*\}$. Using the same formula as that for estimating $\hat{\theta}$, compute the bootstrap estimate, $\hat{\theta}$ from the bootstrap sample. By repeating this process, K times gives $\hat{\theta}^*(1), \hat{\theta}^*(2), ..., \hat{\theta}^*(K)$. We could then estimate the bootstrap distribution of $\hat{\theta}_j^*$ for $j = 1,2, ..., K$, including its mean and variance, from these bootstrap processes. The Bootstrap mean and standard error are given each by (Akyuz & Gamgam, 2019):

$$\hat{\theta}_{Boot} = \frac{1}{K}\sum_{i=1}^{K} \hat{\theta}_i \text{ and } se\left(\hat{\theta}_{Boot}\right) = \sqrt{\frac{1}{K-1}\sum_{i=1}^{K}(\hat{\theta}_i - \hat{\theta}_{Boot})}. \quad (3)$$

Meanwhile, the bootstrap confidence interval is given by:

$$\hat{\theta}_{Boot} \pm Z_{\left(1-\frac{\alpha}{2}\right)} se\left(\hat{\theta}_{Boot}\right) \quad (4)$$

Yanuar et al. (2016) found that the success of the bootstrap estimation process depends on the sampling behavior of statistics being the same when the samples are drawn from the empirical distribution. In this study, bootstrapping technique is applied to sample data of size n=150. Around 100 bootstrapping replications are established here; the model fits for each replication are estimated using SEM analysis. After obtaining 100 values for mean and standard errors for each parameter model, a 95% confidence interval of normal bootstrap is determined (DiCiccio & Efron, 1996). The 95% confidence interval also serves as a power test for classical SEM estimation. If parameter estimations of SEM are within 95% confidence interval bootstrap, it means the SEM method could yield the best fit for the appropriate model.

RESULTS AND DISCUSSIONS

Descriptive Statistics

At the beginning of the questionnaire, the respondents were asked about their age group, gender, education level, and occupation. Descriptive statistics of 160 respondents are provided in Table 1.

Table 1. Descriptive Statistics of Respondents

Variables	Frequency	Percentage
Age Group		
< 27 years old	29	18.0
28-37 years old	36	22.7
38-47 years old	44	27.3
48-57 years old	28	17.3
>57 years old	24	14.7
Gender		
Male	56	34.7
Female	104	65.3
Educational Level		
Elementary	33	20.6
Junior high school	30	18.7
Senior high school	68	42.7
Diploma	10	6.0
Undergraduate	18	11.3
Postgraduate	1	0.7
Occupation		
Civil servant	12	7.3
Private employee	8	5.3
Medium entrepreneurs	20	12.7
Student	10	6.0
Freelance workers	19	12.0
Farmers	16	10.0
Informal sector	40	25.0
Others	35	21.7

Validity and Reliability of Survey Instrument

The validity and reliability of items in the questionnaire are estimated. For validity analysis, the correlation between each item and the total correlation is calculated. Meanwhile, for reliability analysis, Cronbach's alpha is measured for all three latent variables. The results for the reliability tests are presented in the following Table 2.

We can see in Table 2 that all three values for Cronbach's alpha are higher than the recommended value, 0.6 (Ullman, 2010). It means that all five indicator variables are reliable to measure political awareness, all five indicator variables of political knowledge are also reliable to measure corresponding latent variables, and all four indicator variables are also reliable to measure political participation. All indicator variables with corresponding latent variables are presented in Table 3.

Table 2. Result of Reliability Test of Survey Instrument

Construct	Value of Cronbach's Alpha	Description
Political Awareness	0.926	Reliable
Political Knowledge	0.897	Reliable
Political Participation	0.898	Reliable

Then, validity test is also done for all 14 indicator variables. Based on the validity test, all 14 values of the validity test are higher than 0.5 (Yanuar et al., 2015), which means that all 14 indicator variables are statistically valid. Because of limited space, the validity test result is not presented here.

Political Participation Model Based on SEM Approach

SEM is used to examine the hypotheses model by implementing Mplus 5.21 statistical package. The processes of estimation in the SEM approach consist of two steps. In the first step, the measurement model is employed to estimate the validity and reliability. The fit of confirmatory factor analysis to the observed data is evaluated to determine if the items loaded on their corresponding factor. In this section, the data is then fitted to the hypothesis model as presented in Figure 1. This first step is done in the reliability and validity tests above. In the second step, the structural model is employed to test the hypotheses. The proposed model is provided in Figure 2, while the estimated parameter values are presented in Table 3.

After fitting the data to the hypothesis model and allowing for the goodness of fit indicators, this study found that Political awareness directly affects Political knowledge; meanwhile, Political awareness indirectly affects Political participation with Political knowledge as a mediator factor that conducts both

factors. Figure 2 informs that the coefficient loading of Political awareness on Political knowledge is 0.855 which represents the effect of Political awareness on Political knowledge and the determinant coefficient for this relationship is 73.1%. Meanwhile, the coefficient loading of Political knowledge to Political participation is 0.781. The proposed model could explain the variance of Political participation is 60.9%, as an interpretation of the determinant coefficient's value. This information is also provided in Table 3 part A.

Table 3 part B provides the coefficient loadings for the measurement equation, and this study found that Being aware of political engagement is statistically significant to measure Political awareness, indicated by the value of coefficient loading is 0.816 and = 66.6% for this equation. Based on Table 3, it is also informed that all loadings of latent variables on corresponding indicator variables are higher than 0.5, it means that all loadings are statistically significant. Except for loadings for Active to express the political aspiration in measuring Political participation, i.e., 0.473, although this value is still significant.
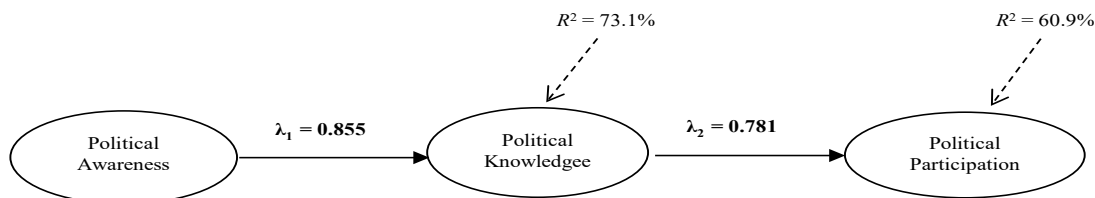

Figure 2. **The Fitted Model of Political Participation**

Table 3. The Results for Political Participation Model Using SEM

No	Items	Loading (Standard Deviation)	R^2
A	**Structural Equation**		
	Political awareness affects Political knowledge	0.855 (0.025)*	73.1
	Political knowledge affects Political participation	0.781 (0.038)*	60.9
B	**Measurement equation**		
	Political awareness		
1	Being aware of political engagement	0.816 (0.036)*	66.6
2	Political participation is the right and obligation	0.607 (0.048)*	36.8
3	Being concerned in socio-political conditions	0.767 (0.033)*	58.8
4	Being aware of political issues	0.694 (0.043)*	48.2
5	Being felt needed	0.623 (0.044)*	38.8
	Political knowledge		
6	Knowing about Electoral Law	0.552 (0.054)*	30.4
7	Knowing about the Electoral process	0.801 (0.051)*	64.2
8	Know the meaning of the election	0.914 (0.033)*	83.5
9	Knowing the issues in political campaign	0.949 (0.023)*	90.0
10	Active in updating political news	0.921 (0.025)*	84.8
	Political participation		
11	Active in political dialogue	0.937 (0.037)*	87.8
12	Active to express the political aspiration	0.472 (0.069)*	22.3
13	Active to support the government political activities	0.768 (0.049)*	59.0
14	Active to promote the political process in the policy process	0.824 (0.033)*	67.9

*Significant at level 0.05

The last column of Table 3 is the value of coefficient determination or for each equation. These values indicate the percentages of variabilities for each latent factor that their corresponding indicator variable could measure. The highest value of is the loading of political knowledge on the services as expected (R^2= 90%), and the lowest is Political participation in discussing good quality of service (R^2= 22.3%).

The indicator for goodness of fit tests are as follows; RMSEA = 0.092, CFI = 0.958 and TLI = 0.982. The values of CFI and TLI are within the acceptance range, and the value of RMSEA is on the borderline since the range of acceptance value of RMSEA is less than 0.08 (Chen et al., 2008; Yanuar et al., 2010). Overall, it is concluded that the proposed Political participation model fits the data reasonably well.

The Reliability Coefficient of Political Participation Model

In this section, we estimate the coefficient reliability of each latent factor based on formulas written in Methods. The simulation study is conducted to review the stability of the multidimensional construct reliability coefficient. Simulations are carried out four times with different sample sizes, i.e., 150, 500, 1000, and 7500. At each simulation, the data are generated using R software. The results of the estimation of the construct reliability coefficient in these simulations are then compared with the estimation results on the original data. The results of the estimation are presented in Table 4. We can see from Table 4 that the parameter estimates using original data and all four simulation studies resulted very close with the absolute bias of less than 3% for all estimated values. We could conclude here that the reliability of the multidimensional constructs in the

hypothesis model in this study is reasonably good, and the proposed model could be accepted.

The Acceptance of Political Participation Model

In this section, we model Political participation using the Bootstrapping approach to test the appropriateness of SEM estimation and corresponding algorithm in recovering the actual parameters because of the violation of normality assumption and moderate sample size. In achieving this purpose, we did a bootstrap estimation for various sizes of replication (R = 10, 25 and 50). We estimated mean bootstrap and 95% confidence interval bootstrap; then, we compared mean SEM and 95% confidence interval bootstrap. Table 5 shows the result of mean SEM, mean bootstrap, and 95% confidence interval bootstrap of all parameters in the model for any replications, with replication R = 10, 25, and 50.

Table 5 presents the corresponding path's mean bootstrap, standard error bootstrap, and 95% confidence interval bootstrap. We can see from Table 5 that the mean bootstrap or coefficient loading between political awareness on political knowledge for R = 10 is 0.862, while the mean SEM is 0.855. The mean bootstrap obtained here is within 95% confidence interval bootstrap (0.853 ; 0.871). We can also see mean bootstrap for other coefficient loadings that all mean bootstrap here are within 95% confidence interval bootstrap and the values are reasonably close, respectively.

Table 6 provides the path's mean bootstrap, standard error bootstrap, and 95% confidence interval bootstrap. It is clear from Table 6 that for R = 25 all mean bootstrap or coefficient loadings obtained here are within 95% confidence interval bootstrap. We can also see these mean bootstrap are reasonably close to mean SEM, respectively.

Table 4. Reliability Test for Original Data and Simulation Data

Latent Variable	Reliability Coefficient	Original Data	Simulation Study			
			Simulation 1 (Absolute Bias)	Simulation 2 (Absolute Bias)	Simulation 3 (Absolute Bias)	Simulation 4 (Absolute Bias)
Political Awareness	*CR*	0.854	0.872 (0.018)	0.854 (0.000)	0.842 (0.012)	0.851 (0.003)
		0.804	0.832 (0.028)	0.805 (0.001)	0.783 (0.021)	0.797 (0.007)
		0.818	0.836 (0.018)	0.824 (0.006)	0.806 (0.012)	0.806 (0.012)
Political Knowledge	*CR*	0.673	0.662 (0.011)	0.666 (0.007)	0.655 (0.018)	0.660 (0.013)
		0.695	0.704 (0.009)	0.684 (0.011)	0.675 (0.020)	0.686 (0.009)
		0.727	0.718 (0.009)	0.719 (0.008)	0.724 (0.003)	0.720 (0.007)
Political Participation	*CR*	0.817	0.799 (0.018)	0.814 (0.003)	0.821 (0.004)	0.813 (0.004)
		0.788	0.778 (0.010)	0.787 (0.001)	0.785 (0.003)	0.789 (0.001)
		0.850	0.859 (0.009)	0.867 (0.017)	0.868 (0.018)	0.851 (0.001)

Table 7 shows that the mean bootstrap for all paths is within 95% confidence interval bootstrap. These mean bootstrap are also reasonably close to mean SEM. Based on this simulation study, we conclude here that Bootstrap percentile intervals seem to work well here. It means that the estimated mean SEM is acceptable. Thus, we believe that the algorithm used in this study could yield the best fit for the proposed model (Yanuar et al., 2013).

The analysis then proceeds to test the unbiased coefficient loadings based on SEM estimation. In this test, we estimate the difference between mean bootstrap and mean SEM, called Bias, then calculate the standard error of Bias. The parameter model is verified as unbiased if the standard error of Bias is less than the standard error of mean bootstrap. Following Table 7 presents the comparison result, we choose mean SEM and mean bootstrapping for $R = 10$ for illustration.

Table 5. The Comparisons of Mean SEM and Mean Bootstrapping for $R = 10$

Items	Bootstrap Simulation				Mean SEM
	Mean Bootstrap	Standard Error Bootstrap	95% Confidence Interval Bootstrap		
			Lower Bound	Upper Bound	
Political awareness affects Political knowledge	0.862	0.005	0.853	0.871	0.855
Political knowledge affects Political participation	0.808	0.039	0.729	0.886	0.781
Political Awareness					
Being aware of political engagement	0.826	0.056	0.717	0.934	0.816
Political participation is the right and obligation	0.628	0.053	0.524	0.731	0.607
Being concerned in socio-political conditions	0.774	0.019	0.736	0.811	0.767
Being aware of political issues	0.717	0.059	0.599	0.835	0.694
Being felt needed	0.649	0.086	0.482	0.818	0.623
Political Knowledge					
Knowing about Electoral Law	0.563	0.093	0.379	0.746	0.552
Knowing about Electoral process	0.823	0.011	0.761	0.885	0.801
Know the meaning of the election	0.936	0.032	0.874	0.998	0.914
Knowing the issues in political campaign	0.959	0.024	0.911	1.007	0.949
Active in updating political news	0.915	0.433	0.652	1.764	0.921
Political Participation					
Active in political dialogue	0.932	0.052	0.829	1.034	0.937
Active to express the political aspiration	0.489	0027	0.436	0.542	0.472
Active to support the government political activities	0.771	0.081	0.613	0.929	0.768
Active to promote the political process in the policy process	0.863	0.075	0.716	1.009	0.824

Table 6. The Comparisons of Mean SEM and Mean Bootstrapping for $R = 25$

Items	Bootstrap Simulation				Mean SEM
	Mean Bootstrap	Standard Error Bootstrap	95% Confidence Interval Bootstrap		
			Lower Bound	Upper Bound	
Political awareness affects Political knowledge	0.867	0.031	0.806	0.929	0.855
Political knowledge affects Political participation	0.799	0.044	0.712	0.886	0.781
Political Awareness					
Being aware of political engagement	0.824	0.040	0.746	0.903	0.816
Political participation is the right and obligation	0.585	0.096	0.398	0.772	0.607
Being concerned about socio-political conditions	0.775	0.056	0.665	0.885	0.767
Being aware of political issues	0.693	0.061	0.575	0.812	0.694
Being felt needed	0.591	0.157	0.284	0.898	0.623
Political Knowledge					
Knowing about Electoral Law	0.576	0.075	0.428	0.723	0.552
Knowing about the Electoral process	0.819	0.102	0.619	1.019	0.801
Know the meaning of the election	0.931	0.025	0.881	0.980	0.914
Knowing the issues in political campaign	0.956	0.023	0.911	0.999	0.949
Active in updating political news	0.917	0.037	0.844	0.990	0.921
Political Participation					
Active in political dialogue	0.924	0.056	0.815	1.034	0.937
Active to express the political aspiration	0.467	0.103	0.266	0.668	0.472
Active to support the government political activities	0.782	0.077	0.631	0.933	0.768
Active to promote the political process in public policy	0.835	0.083	0.673	0.997	0.824

Political Awareness, Knowledge, and Participation Relationship using Structural Equation Modeling Approach
(Aidinil Zetra, Kartini Aboo Talib @Khalid, Ferra Yanuar and Susi Marisa)

The standardized regression weight for Political awareness to Political knowledge based on SEM estimation is 0.855, while bootstrap estimation is 0.862. The difference between these two coefficient loadings (called Bias) is 0.007. The standard error of mean bootstrap, which is 0.005 is higher than the standard error of Bias, which is 0.0002. Therefore, bootstrap estimation indicates that factor loading of Political awareness to Political knowledge is unbiased. We then compare the standard error of mean bootstrap and standard error of Bias to other paths. It is obtained that all factor loadings obtained here are verified as unbiased since all standard errors of mean bootstrap are higher than the corresponding standard error of Bias. It could be said that all factor loadings are acceptable. Thus, we also could conclude here that the proposed model obtained here could be accepted.

Table 7. The Comparisons of Mean SEM and Mean Bootstrapping for R = 50

Items	Bootstrap Simulation				Mean SEM
	Mean Bootstrap	Standard Error Bootstrap	95% Confidence Interval Bootstrap		
			Lower Bound	Upper Bound	
Political awareness affects Political knowledge	0.862	0.037	0.789	0.934	0.855
Political knowledge affects Political participation	0.788	0.058	0.674	0.903	0.781
Political Awareness					
Being aware of political engagement	0.824	0.047	0.732	0.916	0.816
Political participation is the right and obligation	0.575	0.083	0.411	0.738	0.607
Being concerned about socio-political conditions	0.756	0.056	0.647	0.867	0.767
Being aware of political issues	0.688	0.051	0.588	0.788	0.694
Being felt needed	0.581	0.124	0.337	0.825	0.623
Political Knowledge					
Knowing about Electoral Law	0.534	0.136	0.268	0.801	0.552
Knowing about the Electoral process	0.815	0.064	0.689	0.939	0.801
Know the meaning of the election	0.935	0.032	0.874	0.998	0.914
Knowing the issues in political campaign	0.940	0.030	0.881	1.000	0.949
Active in updating political news	0.916	0.042	0.834	0.998	0.921
Political Participation					
Active in political dialogue	0.912	0.058	0.798	1.026	0.937
Active to express the political aspiration	0.449	0.090	0.273	0.627	0.472
Active to support the government political activities	0.772	0.068	0.639	0.905	0.768
Active to promote the political process in public policy	0.834	0.062	0.713	0.955	0.824

Table 8. The Comparisons of Mean SEM and Mean Bootstrapping for Political participation model

No	Items	Mean SEM	Mean Bootstrap	SE of Mean Bootstrap	Difference (Bias)	SE Bias
	Political awareness affects Political knowledge	0.855	0.862	0.005	0.007	0.0002
	Political knowledge affects Political participation	0.781	0.808	0.039	0.027	0.0002
	Political Awareness					
1	Being aware of political engagement	0.816	0.826	0.056	0.001	0.0002
2	Political participation is the right and obligation	0.607	0.628	0.053	0.021	0.0002
3	Being concerned about socio-political conditions	0.767	0.774	0.019	0.007	0.0002
4	Being aware of political issues	0.694	0.717	0.059	0.023	0.0002
5	Being felt needed	0.623	0.649	0.086	0.026	0.0002
	Political Knowledge					
6	Knowing about Electoral Law	0.552	0.563	0.093	0.011	0.0002
7	Knowing the Electoral process	0.801	0.823	0.011	0.022	0.0002
8	Know the meaning of the election	0.914	0.936	0.032	0.022	0.0002
9	Knowing the issues in political campaign	0.949	0.959	0.024	0.001	0.0002
10	Active in updating political news	0.921	0.915	0.433	-0.006	0.0002
	Political Participation					
11	Active in political dialogue	0.937	0.932	0.052	-0.005	0.0002
12	Active to express the political aspiration	0.472	0.489	0.027	0.017	0.0002
13	Active to support the government political activities	0.768	0.771	0.081	0.003	0.0002
14	Active to promote the political process in public policy	0.824	0.863	0.075	0.039	0.0002

CONCLUSIONS

This study found that Political Knowledge significantly affects Political Participation. Political Knowledge is also a mediator which relates Political Awareness to Political Participation. These findings are rather similar to the study by Reichert (2016), which indicated that Political Knowledge could directly influence Political Participation. Unfortunately, it is unknown what factors cause differences in the level of Political Knowledge of citizens which eventually causes them to participate in politics. Therefore, this study fills the research gap by explaining the factors that cause citizens to improve their Political Knowledge, namely Political Awareness. Finally, this study found that the Political Awareness of citizens is strongly influenced by their awareness of the importance of their involvement in political life, their awareness to have the right and obligation to participate in politics, their concern for the current socio-political situation, their concern for various political issues and the need to get involved in politics. Meanwhile, political knowledge that influences citizens to participate in politics is their understanding of the importance of elections and election regulations and mechanisms. It makes them seek information about the issues raised by candidates in the campaign. They always try to update political news. So high political awareness causes citizens to try to increase their political knowledge to participate in politics. The form of citizen participation is being active in political dialogue, expressing aspirations, supporting government programs and policies and being involved in the policy process.

This study investigates the acceptability, reliability, and performance of SEM's algorithm to obtain the proposed model of Political Participation. The acceptability of the proposed model is checked based on the goodness of fit. After fitting the data to the hypothesis model, this present study found that the proposed model fits the data reasonably well. The stability of SEM's algorithm to achieve the acceptance of the multidimensional construct is examined using a reliability test. Three estimation methods of reliability coefficient values are employed. This present study successfully obtained a reliable model for moderate-size sample and nonnormal data cases. The performance of SEM and its algorithm is evaluated using Bootstrapping method. All estimated values of mean bootstrap acquired are within 95% confidence interval bootstrap. The mean bootstrap is reasonably close to the mean SEM. It could be said that the parameter model obtained is verified as unbiased. Finally, it is concluded that the proposed model of Political Participation obtained here is the best model and it could be accepted.

These methods could be implemented in other studies with similar problems. The idea of modeling political participation by considering various indicators describing latent factors could be explored by incorporating new survey data. In this way, at least to some extent, the current political participation of individuals living in Padang can be monitored. This research suggests that it is necessary to develop the attitude and political orientation of citizens towards political life through political socialization by various agents such as families, schools, government, political parties, election management bodies, informal leaders, mass media, and so on. In addition, the government must create information disclosure and freedom of expression.

The limitation of this study is the variables used are still restricted. Several other variables could be examined as the factors on political participation, such as the influence of social media, perceptions of corruption, and political trust. It is suggested to model the level of political participation by including these independent variables in the hypothetical model.

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