

Predicting Anti-Coastal Reclamation Engagement: A Logistic Regression Analysis of Philippine Mainline Protestant Church-Members in Bacolod City

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Abstract

The Banago Coastal Reclamation Project is a 247-hectare reclamation initiative in Bacolod City, Negros Occidental. Proposed in August 2022, it is predicted to displace 6,000 families and damage surrounding mangrove ecosystems lining up coastlines of Banago, Bacolod. The political engagement of religious actors participating in anti-coastal reclamation movements has been evident in opposing such project, particularly in alliance-networks of mainline Protestant churches present in the area. In mainline Protestantism, the discourse on political participation involves integrating the practice of evangelism on the principles of social justice and ecological well-being. The focus of this study hinged on identifying the odds of political participation amongst mainline Protestant church-members in anti-coastal reclamation movements using logistic regression analysis. The study is only limited in exploring increments of political participation on five (5) Bacolod mainline Protestant churches – the Convention of Philippine Baptist Churches, United Church of Christ in the Philippines, United Methodist Church, Philippine Independent Church and the Salvation Army. The assumed predictor variables are personal resources, political motivational factors, group membership and demographic proximity. The logit model suggests church doctrinal stance (under the category of political motivation factors) is the only predictor which expresses a significant parameter for comparing the Political Participation with “Yes” response versus the Political Participation group with “No” response. A one-unit increase in the said predictor is associated with a 1.719 increase in the relative log odds for a mainline Protestant church-member to participate (or not participate) in anti-coastal reclamation movements.

Keywords: logistic regression analysis, mainline Protestant, political participation, environmental citizenship



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INTRODUCTION

Background of the Study. The political engagement of religious actors participating in anti-coastal reclamation movements has been evident particularly in the case of Bacolod City, Negros Occidental on which coastal reclamation was forestalled and confronted by both Roman Catholic and mainline Protestant churches (specifically, the Philippine Independent Church and the United Church of Christ in the Philippines) (Samillano, 2022). In the context of mainline Protestantism, the discourse on political participation would involve integrating the practice of evangelism on the principles of social justice and ecological well-being (Aoanan, 2009, p. 84).

The focus of this study hinged particularly on the parameters of identifying predictors of political participation amongst church-members in mainline Protestant denominations

in anti-coastal reclamation engagement. To account, mainline Protestant churches convey a long history of socio-political struggle and engagement which sets them apart from other Protestant groups. In the Philippines, the umbrella organization for mainline Protestant churches is the National Council of Churches in the Philippines (National Council of Churches in the Philippines, n.d.). Relative to the practice of coastal reclamations, NCCP has been steadfast on its advocacy on environmental protection and is in opposition to endeavors that could jeopardize the environment (i.e., large-scale mining, massive deforestation, reclamation, etc.) (Aoanan, 2004, p. 84).

Research Problem. This research aims to identify the odds of political participation amongst Philippine Mainline Protestant church-members, particularly in the context of anti-coastal reclamation movements. It should be noted that while the National Council of

Churches in the Philippines would often express a progressive take on theology and has released critical statements on pressing Philippine social and political issues; stances within its member mainline Protestant denominations can vary. Considering such gap, the following research questions were formulated:

1. What are the odds that demographic proximities, personal resources, political motivational factors, and group networks will predict Bacolod-based mainline Protestant church-members to participate in anti-coastal reclamation movements?
2. What relationships exist between demographic proximities, personal resources, political motivational factors, and group networks in anti-reclamation movements among Bacolod-based mainline Protestant church-members?
3. What is the best model to predict political participation of mainline Protestant church-members in anti-coastal reclamation movements?

Scope and Limitation. This study is concerned only in finding the odds of political participation amongst mainline Protestant church members in anti-coastal reclamation movements within the study local of Bacolod City, Negros Occidental. The researcher was limited to examining relationships between predictors and the response variable (political participation). Political participation was limited to mainline Protestant church-member participation in anti-coastal reclamation movements as well as in rallies and picket mobilizations.

The researcher has identified five mainline Protestant denominations which are present and common in the research settings, mainly-- the Convention of Philippine Baptist Churches, the United Methodist Church, the United Church of Christ in the Philippines, the Salvation Army and the Philippine Independent Church (Aglipayan). The study did include mainline

Protestant denominations which are not present in the study locale.

LITERATURES

Political Participation and Mobilization. It is crucial to consider beforehand how political participation derives its outset on group consciousness. Contending how group consciousness occurs under complex arrangements, Arthur Miller and his colleagues assert four dimensions prior to its conception, mainly, (i) group identification (linkages of inclusiveness and loyalty forged in a particular social class, economic circumstance or groups and individuals sharing similar traits and characteristics), (ii) polar affect (an inclination to be preferential in one's ingroup and differential to outgroups), (iii) polar power (contentment and discontentment on the group's contemporary status) and (iv) a tendency to system blame (Miller et al., 1981, p. 495). Relative to approaches that could outsource the development of political participation, Miller suggests two approaches, mainly an additive approach (which sees political participation as a cumulative phenomenon that increases as social cleavages continue to amplify) and subordinate groups model (in which groups belonging within subordinate or marginalized aggregates of society collectively mobilize to contest systemic problems which may be attributed to their plight) (Miller, 1981, p. 500).

Considering how political participation occurs as an exchange between group consciousness and pressing socioeconomic circumstances, researcher's understanding of the occurrence of such phenomenon needs to acknowledge how political participation exists in different activities, including voting, lobbying, staging rallies and protest as well civil society endeavors (Potgieter, 2013, p. 23). Moreover, increments of contention in political participation lays on variability of conflict and levels of pressure exerted by mobilizing groups towards a particular target point – usually government structures – of whom have the capacity to address existing concerns and craft necessary solutions (Dalton, 2008, p. 24).

Carrying the same sentiment on how contention relates to degrees of political participation, Hanspeter Kriesi argues how increments of political mobilization are dependent on the depth of crises a particular collective may experience. The permutations of these crises can span from socioeconomic conflict (e.g., economic recession and loss of job opportunities) to ecologically-and-resource based concerns (e.g., displacement from native residence which can affect an individual's access to resources). To cite support for his assumption, Kriesi utilized historical events such as the Great Depression in the United States which amplified the growing interest to participate in labor unions. The gravity of the crisis activated key civil society actors spanning from labor unions, mainline churches, and urban poor organizers to collectively demand for economic justice in such a period characterized by crisis and uncertainty (Kriesi, 2015, p. 19-21).

Context of Anti-Coastal Reclamation Movements in Bacolod. In the case of Bacolod City, Negros Occidental, the anti-coastal reclamation alliance “Banago Against Reclamation Movement (BARM)” is a collective response of church people, fisher-folk and human-rights based mass organizations prior to the proposed 247-hectare reclamation project in Barangay Banago, Bacolod City. To account, the proposed reclamation initiative would displace 6,000 families and deprive them from their economic livelihood. Moreso, lacking necessary permits from the Department of Environment and Natural Resources (DENR), Philippine Reclamation Authority (PRA), Bureau of Fisheries and Aquatic Resources (BFAR), Philippine Ports Authority (PPA), the coastal reclamation initiative can be detrimental to surrounding marine ecosystems which line-up the coastlines of Banago, Bacolod City (PAGHIMUTAD, 2022). Prior to church denominations present, both parishes of the Iglesia Filipina Independiente (Philippine Independent Church) and the Roman Catholic diocese of Bacolod City were key participants in the launching of BARM. Relative to temporal scales, the movement was initially launched on September 11, 2022.

Psychological Proximity Hypothesis and Sociopolitical Attitudes. Aaron Sparks in his dissertation, “Reducing Distance to Increase Action: How psychological proximity drives political activism”, introduces psychological proximity hypothesis as an assumption to explain increments of political participation in a group or an individual. The said hypothesis states that when an issue is proximate, people are more likely to participate in political activism on an issue (Sparks, 2017, p. 5). It is crucial consider how psychological proximity in Spark’s hypothesis is a predicate on an individual or group’s decision to engage in political activism. Using the rhetoric on likelihood on psychological proximity, Spark provided the following examples: (i) a nuclear plant could be slated for approval, may compel an individual whose community is of nearer proximity to the nuclear plant site on becoming an anti-nuclear activist and (ii) a school shooting may occur, whose aftermath may concur community individuals to be advocates for a stricter gun access law (Sparks, 2017, p. 5). Clearly, people are more inclined to take a specific action, when presented with one, because they are able to observe the linkages between a concrete problem and a specific action that addresses it. To illustrate Spark’s hypothesis, an individual whose proximity is nearer in the vicinity of the problem being faced (within the range of five to ten kilometers) would be more likely to participate in political activism relative to an individual whose vicinity is farther from the site (exceeding ten kilometers or more).

Socio-ecological engagement and political participation in Mainline Protestantism. The conception of an-ecological justice-based theology draws a cumulative endeavor of the social gospel movement as it links biblical analysis to exchanges which occur between nature-and-society. Particularly it has been advocated by Presbyterian and Protestant Episcopal ministers such as Rev. Dough Hunt of whom placed the need to extend the “justice mission” of the church to discussions concerning environmental protection and sustainability (Moody, 2002, p. 240). Such initiative would lead to the development of

environmental task forces amongst mainline Protestant churches such as the Eco-Justice task force of the Presbyterian Church and the Baptist Association, the Department of Environmental Justice and Survival of the United Methodist Church and the inclusion of “sacred ecology” in the prayer books of the Protestant Episcopal Church (Moody, 2002, p. 242).

Prior to the Philippine setting, the umbrella organization of mainline Protestantism – the National Council of Churches in the Philippines – has been critical relative to ecological issues particularly on deforestation, coastal reclamation, and open-pit mining. Relative to member-based commitment on ecological justice, the United Church of Christ in the Philippines (a communion of five indigenous Philippine mainline Protestant churches: the Reformed Church, the Congregational Church, the United Brethren, the Philippine Methodist Church, and the Presbyterian Church) has released in its 1990 assembly, a primer on ecological justice entitled “The Church for the life of the World: Called to be Stewards of God’s Creation”. The following statement reiterated the need for a church to “prophetically” witness and participate on concerns which plague both society and ecology (Aguilan, 2016, p. 8). In the case of the Lutheran Church of the Philippines, the mainline denomination has been active in mobilizing its churches particularly the youth sector (the Philippine Lutheran Youth League) in the quest for environmental justice and eco-responsibility by integrating environmental themes on church curricula and liturgy (Weyermüller, 2020).

METHODS

Research Design. The study utilized an explanatory sequential mixed-method research design. The researcher considered an initial quantitative phase (through administered survey questionnaires) and a qualitative phase geared on key informant interviews (Subedi, 2016). Considering how the research design is non-experimental, its object of focus is on predictions; conclusions drawn from the study are descriptive.

Theoretical Approaches of Predictors for Political Participation. The generalized nature of these approaches makes it possible for the researcher to narrow down the research topic, making it possible in the process, the probability of identifying points on which he or she can intervene upon. Particularly, the researcher has identified two frameworks which are prevalent on predictor and correlation studies on political participation (Dalton, 2008; Potgieter, 2013; Putnam, 2000) mainly social capital approach (SCA) and civic volunteerism model (CVM). The structure of this section provides a quick overview on the mechanism of how each framework operates and identify its existing limitations.

These approaches were crucial in providing a need to grasp the dynamics on how and why mainline Protestant churches participate in anti-coastal reclamation movements. Understanding increments of participation of the study interest were vital to assess if variability across mainline Protestant denominations is existent, as well as factoids that could influence their degree of engagement. Relative to the contribution of the study in the discipline of political science, identifying predictors of political participation amongst mainline Protestant denominations in anti-coastal reclamation movements can provide additional perspectives on environmental citizenship (particularly the niche played by mainline churches). In essence, environmental citizenship is the growing increment of social consciousness and responsibility of citizens within the exchanges which occur between nature-and-society (Karlsson, 2012, p. 460). It recognizes the need to acknowledge the existence of nature-and-society interactions as means to “materialize” policy-making and ecological reforms in the direction of local communities. Themes related to environmental citizenship include a deeper grasp on sustainability, ecological justice, and the capacity to strategize measures that mitigate risk.

Social Capital Approach. Seeing the nexus of society as a network assemblage with associated social algorithms, Robert Putnam

defines social capital as an increment of “trustworthiness” that “arises” amongst interactions between individuals and existing social networks (Putnam, 2000, p. 19). It is crucial to consider how Putnam utilizes the verb “arise” to depict the dynamics of trustworthiness within social aggregates as if to imply how the conception of social capital is a cumulative endeavor which builds up over time. It is within such an arrangement, that Putnam frames his social capital approach, in which social networks are considered as a key variable that could affect the behavior of groups and individuals within an existing collective or the very realm of society (Putnam, 2000, p. 18). Utilizing correlations to frame his argument, Putnam contends how societies with high increments of individuals participating in social and civic activities are more probable to be trustworthy and successful relative to societies whose increments of participation are lower (Putnam, 1993). Moreso, a positive correspondence between trust levels and socio-civic engagement provides the likelihood for higher intensities of political mobilization and activism.

Despite of its capacity to draw relationship between variables (e.g., how levels of political activism are dependent to increments of trust levels and socio-civic engagement), critics of the approach contend how the utility of the word “capital” in the phraseology of the approach diminishes the value of Putnam’s social capital particularly in the black-and-white areas of judgements rooted on morality and immorality. For instance, such an argument is visible to Michael Cohen’s concept of a “neutral” social capital (Cohen, 2000, p. 221). To account, Cohen flags social capital as neutral since it occurs under the arrangement of direct interpersonal exchanges between social networks and economy. Moreso, social capital is simply a resource whose utility is constrained in attaining social coherence to prospects which are associated often with morality such as social justice or equity.

Civic Volunteerism Model (CVM). The conception of civic volunteerism model (CVM) flags the approach as a “resource model” to determine

the nature of political participation. To account, the following model contends how permutations on political participation are inclined by resource availability within the parameters of an individual. These resources could range from an individual’s characteristics such as existing generational gaps, gender, religion, geography, and ethnicity (Brady et al., 1995, p. 271). The model tackles three variables as main predictors for political participation: 1) an individual’s economic resources (social status and educational attainment), 2) demographics and, 3) political interest and increment to engage in socio-civic activities. Such is further utilized in the study conducted by Russel Dalton’s study on citizen politics within the arrangements of advanced industrial democracies, where he considered “associational networks” expressed within the parameters of religion, ethnicity and geography as facilitators that can further amplify political participation. Moreso, the existence of uncertainties and the necessity to address such pressing concerns envelopes a heightened atmosphere of socio-civic and political engagement (Dalton, 2008, p. 58).

On its general take of predictors that can influence political behavior and increments of engagement, the model expressed its limitations on not having the capacity to consider variables which may possibly impact an individual’s political choice to participate (Potgieter, 2013, p. 39). Despite such, it garners an appropriate framework for quantitative research since it gives the researcher the ability in quantifying generalized predictor variables relative to the existence of a particular phenomenon (in this case political participation).

Schematic Diagram and Discussion of Key Variables. A conceptual framework in research serves as a direction instrument that a researcher uses to generally determine theories and corresponding methodologies for the current research project. To account, the following framework (see Figure 1) is structured as a proposed original model (POM) depicting the summarized civic volunteerism model

(which contains both predictor and response variables, on the right side of the framework).

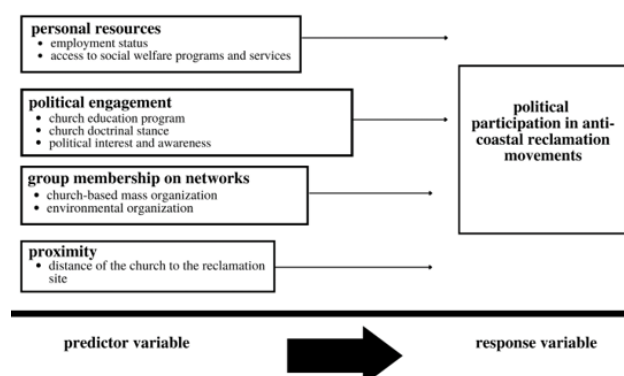


Figure 1
Schematic diagram of the study

Predictor and Response Variables of the schematic diagram. It is crucial to consider beforehand how a response variable is a variable which is to be observed while a predictor variable is a variable which is used to explain the values of a response variable. Civic volunteerism model considers social and psychological aspects as means to predict and determine increments on why people participate in political activities. Moreover, the said approach takes into account the significant niche of citizen engagement in a political system (Potgieter, 2013, p. 30). As such, the model identifies four predictor variable categories for political participation mainly (i) personal resources, (ii) political engagement, (iii) group membership on networks, and (iv) demographics. Prior to element predictors within the study interest on participation amongst Philippine Mainline Protestant church-members in anti-coastal reclamation movements of Bacolod City, Negros Occidental, the researcher pursued the following limits: (i) for personal resources: employment status and access to social welfare programs and services, (ii) for political engagement: the nature of church education programs and church doctrinal stance, levels of political interest and awareness (iii) group membership on networks: church-based mass organization and environmental organization and, (iv) for proximity: distance of the church to the coastal reclamation site. Correspondingly, the response variable was political participation. The linear

direction of the arrows in the schematic diagram depicts the dynamics of the mentioned predictor variables to the response variable of the study. The researcher of this study has attempted to contextualize these variables in the research interest of mainline church-members' participation in anti-coastal reclamation movements. Moreso, the pursued element predictor variables were identified as to be distinct from recurring literature on political participation.

Sampling Method. The following study utilized a stratified random sampling as its instrument for sampling method. The method has been applied as a forthright probability sampling instrument since it only involves a division of a population into smaller subgroups known as strata sharing homogeneous characteristics (Mills and Gay, 2019, p. 191). Prior to its capacity to obtain higher chances of a representative sample, stratified random sampling ensures that every individual has equal chances once to be selected (in its utility of conducting a simple random sample once the population has been divided into strata) and how the selection of such individual does in no way affect the selection of another individual.

Respondents of the Study. The researcher of this study focused its respondents within church-members of mainline Protestant denominations in the locale of Bacolod City.

Table 1
Distribution of Respondents in Bacolod City, Negros Occidental (At 0.08 Margin of Error)

Mainline Protestant Denomination	<i>f</i> (population)	<i>f</i> (sample)
Convention of Philippine Baptist Churches	10,954	78
United Methodist Church	29	1
Salvation Army	62	1
United Church of Christ in the Philippines	8,632	61
Philippine Independent Church (Aglipayan)	1,215	8
Entire group (Σ)	= 20, 892	= 149

Moreso, stratified random sampling as the method of application established by the researcher randomly choosing a proportional subset from the sample size total of 149. The sample size was obtained using Slovin's formula at 0.08 margin of error.

Data Analysis. Frequency distribution tables and bar-plots were utilized to depict the respondent in terms of the predictor and response variables of the study. To address the research problem on relationships which exist between predictor and response variables, bivariate analysis was utilized as quantitative instrument. Scatterplots and correlation coefficients were employed to determine the association of the dependent variable with each numerical independent variable. Logistic regression is the appropriate regression analysis to conduct when the response variable of the study is dichotomous (binary). As an instrument of regression analysis, the logistic regression is predictive. Logistic regression is utilized both to describe data and to explain the relationship between one dependent binary variable and one or more nominal, ordinal, interval or ratio-level independent variables (Kleinbaum and Klein, 2010). Moreso, the regression instrument is a statistical model that models the probability of an event taking place by having the log-odds for the event be a linear combination of one or more predictor variables (Tolles & Meurer, 2016, p. 533). The said data instrument would involve the use of: (i) coefficients (strengths and directions of relationships between two or more variables) and (ii) beta-weights (the expression of influence of each predictor variable, which enables the researcher to assess relative importance of each predictor) (Potgieter, 2013, p. 74).

Significance of Predictor Variables. The Wald Test (also referred to as Wald Chi-Squared Test) is a parametric statistical instrument utilized both to confirm a set of predictor variables are indeed collectively significant for a model. A predictor variable is significant if and only if such variable adds an incremental value to the model. As such, variables which fail to add value to the model are omitted. Wald test utilizes the parameter's sample estimate and an estimate of variability to obtain conclusions about the unobserved true value of the parameter. (Baum, 2006). Moreover, in the lens of logistic regression, Wald test is used to compare models on best fit. This technique is used to determine 'significant' variables from

the set of predictors used in to an array of models with binary variables or models with continuous variables.

Model Diagnostics. As means to determine the candidate models, possible models were examined through a set of diagnostic checking procedures. If a specific model violates one of the assumptions, it is rejected from the pool of candidate models. The following procedures would be crucial in answering the third research question of this study. The table below summarizes the procedure.

Table 2
Diagnostic Checking Procedures and Formal Tests

Assumptions	Diagnostic Checking
Goodness of fit	Hosmer-Lemeshow Test
No influential outliers	Cook's Distance Measure
No covariate is a perfect linear function of any other covariates (multicollinearity)	Generalized Variance Inflation Factors
No indication of overdispersion in data	Overdispersion Ratio Test

Key Informant Interview (KII). Key-informant interviews were utilized to give support on the analyzed data from logistic regression. Such was pursued to supplement and humanize statistical data obtained from the regression analysis.

Table 3
Criterion in Selecting Participants for Key Informant Interview (KII)

Criterion	Rationale for criterion
A church minister or a church worker of a mainline Protestant denomination	Such criterion was chosen in order to contextualize theological dynamics on each mainline Protestant denomination
A church member of a mainline Protestant denomination residing in Bacolod City, Negros Occidental	Such criterion was chosen in order to situate within the current coastal reclamation in the locale of the study
A leader or any member of church-based mass organizations in the Banago Against Anti-Reclamation Movement (BARM) *Regional councils of the National Council of Churches in the Philippines	Such criterion was chosen in order to consider groups and individuals of whom express political participation either in socio-civic action and protest mobilizations

Using purposive sampling, the researcher conducted an interview question on key persons within the focus mainline Protestant denominations of the study locale. One key informant was purposively chosen from each mainline Protestant denomination in Bacolod City, Negros Occidental. As such, the following criterion is structured in Table 3.

RESULTS

Logistic Regression Analysis. A multiple logistic regression was performed to model the relationship between the predictors and the political participation of the churchgoers (whether yes or no). The conventional 0.05 criterion of statistical significance was employed for all tests. Addition of the predictors to a model that contained only the intercept significantly improved the fit between model and data, Chi-square test showed (df=9, N = 149) = 85.4, Nagelkerke R-squared = 0.584, $p < .001$. As shown in Table 4, significant specific contribution was made by Church-doctrinal stance. Goodness of fit was explored by conducting Hosmer-Lemeshow test which resulted to a non-significant results of Chi-square test showed (df=8, N=149) = 2.548. The results would imply that the multiple logistic regression model is a good fit.

Table 4
Predictors' Contributions in the Multiple Logistic Regression (N=149)

Predictor	Test Statistic	Df	P
Employment status	1.314	1	0.252
Proximity	2.685	1	0.101
Access to social welfare programs	1.299	1	0.254
Church-based mass organization	2.108	1	0.147
Environmental organization	0.176	1	0.675
Political awareness	2.117	1	0.146
Political interest	0.202	1	0.653
Church education program	0.428	1	0.513
Church-doctrinal stance	7.654	1	0.006

The reference group was those churchgoers who said "Yes" to political participation. Accordingly, each predictor has one parameter which is for predicting membership in the "No" group rather than the "Yes" group. To facilitate the interpretation of differences among continuous predictors, each of the predictor variables had been standardized to mean of zero, and a standard deviation of one.

Only one predictor had a significant parameter for comparing the Political Participation (Yes)

group versus the Political Participation (No) Group. For each one standard deviation increase in Church Doctrine, the odds of being in the Political Participation (Yes) group rather than the Political Participation (No) group are multiplicatively increased by 1.223. Taking into account only the base rates of group membership, one would predict, for every case, membership in the Political Participation (Yes). This would result in 55.0% of such predictions being correct. Using the logistic model to make such predictions results in 81.9% correct prediction. Correct predictions were more frequent for the Political Participation (No) group (85.1%) than the Political Participation (Yes) group (79.3%).

The researcher also culled the model to exclude all predictors that did not have significant specific effects on the response variable. The resulting model was statistically significant, $X^2(1) = 73.604$, Nagelkerke $R^2 = 0.522$, $p < .001$. The overall percentage of correct classifications increased, to 83.9%. Correct predictions were more consistently frequent for the Political Participation (No) group (89.6%) than the Political Participation (Yes) group (79.3%) which remained the same. Similarly, the Goodness of fit was explored by conducting Hosmer-Lemeshow test which resulted to a non-significant results of Chi-square test showed (df=6, N=149) = 4.769. The results would imply that the multiple logistic regression model is a good fit.

As shown in Table 5, Church doctrine remained a consistent predictor variable between Political Participation (YES) and Political Participation (NO). Hence, the final model is:

$$\ln\left(\frac{p}{1-p}\right) = -3.649 + 1.719X, p = \frac{e^{-3.649 + 1.719X}}{1 + e^{-3.649 + 1.719X}}$$

Where: X = is the Church Doctrine Variable

In this final model, it can be observed that a one-unit increase in the variable church doctrine is associated with a 1.719 increase in the relative log odds of being in a Political Participation (Yes) group versus Political Participation (No) group.

Table 5
Parameter Estimates for the Reduced Model (N = 149)

Predictor	Political Participation (YES) VS (NO)	B	OR	P
Church-doctrinal stance		1.719	5.580	0.000
Intercept		-3.649	0.026	0.000

Spearman Rho Correlations for Bivariate Analysis. Spearman's rho correlation analysis was utilized considering how the dataset has ranked Likert data. The following heat-map below (see Figure 2) displays the Spearman's rho of each pairwise variable. To account, pairwise correlations are significant if $p < 0.05$.

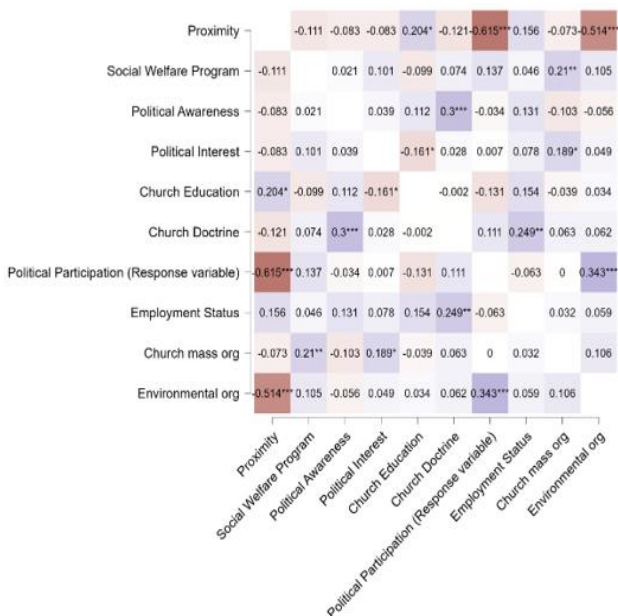


Figure 2
Heatmap of Spearman's Rho correlations

At $p < 0.05$, the following pairwise Spearman correlations are significant: (i) church education x proximity, (ii) church education x political interest, (iii) membership in a church mass organization x political interest, (iv) proximity x church education, (v) political interest x church education, (vi) political interest x membership in a church mass organization.

Summary of Qualitative Data per Sample Denomination from Key Informant Interviews. For qualitative summary of the data obtained from key informant interviews, majority of the sampled mainline Protestant denominations

embodied the principles of social justice and environmental stewardship with the exception of the Convention of Philippine Baptist Churches which expressed minimal increments on such initiatives. In the domain of participation in rallies, mainline Protestant participation occurred in varied arrangements. For instance, in the Convention of Philippine Baptist Churches, only few pastors and church workers participated; on the other hand, United Methodists engaged in such practice since dissent is expressed as a core of Methodist principles; members of the United Church of Christ in the Philippines (an organic union of the Presbyterian Church, the Disciples of Christ, the United Brethren, the Philippine Methodist Church and the Congregational Church) orient their engagement in terms of statements and primers; the Philippine Independent Church (Iglesia Filipina Independiente) considered its local unit, the diocese—as the primary locus of response to pressing socioecological concern; political participation may be expressed on picketing, prayer vigils and rallies. On the other hand, while the Salvation Army does not prohibit participation in rallies, the denomination geared its engagement through network-building and solidarity campaigns to concerned communities. This is also reflected on another mainline Methodist denomination in the Philippines, the Evangelical Methodist Church of the Philippine Islands (Iglesia Evangelica Metodista en las Islas Filipinas) which has been steadfast in community-based networks with sectors belonging within the margins of Philippine society—the fisherfolk, the peasantry and indigenous people.

When asked on the denomination's stance on the issue of coastal reclamation in Bacolod, the critical response in the Convention of Philippine Baptist Churches is only visible in a small number of progressive ministers—majority in the denomination were either not engaged or unaware of the reclamation project. Such is also visible in the case of the Salvation Army which has not released statements on the reclamation initiative. On the other hand, the sampled mainline Protestant denominations—the United Methodist Church (and the Evangelical Methodist Church of the Philippine

Islands), the United Church of Christ in the Philippines and the Philippine Independent Church—carried strong sentiments to see the coastal reclamation in Bacolod as “anti-poor”, “ecologically destructive”, “injustice” and “green-washing”.

On the cause of the ecumenical movement and ecological justice, majority of the sampled Protestant denominations expressed increments of ecumenism. For the United Methodist Church and the Evangelical Methodist Church in the Philippine Islands, integrating ecological justice to the ecumenical movement is a Christian imperative for ecological justice—this was often expressed through cooperation with other churches and denominations and a part of the ministry of social and ecological transformation; the United Church of Christ in the Philippines extended ecumenism beyond the parameters of mainline Protestantism and considered other faith communities such as the evangelical Protestants (the Philippine Council of Evangelical Churches) and the Roman Catholic church to forward the struggle for ecological justice and environmental stewardship; the Philippine Independent Church on the other hand, contextualized the ecumenical movement in challenging policies which are perceived as anti-environment—the denomination construed these initiatives as an ecological plunder; for the Salvation Army, there is recognition on environmental stewardship as a crucial component of the ecumenical movement. Of the sample mainline Protestant churches, the Convention of Philippine Baptist Churches has been suspicious on the ecumenical movement as it could compromise Baptist principles and distinctives.

Relative to church education, the sampled mainline Protestant churches had been steadfast in contextualizing theology in the struggles and experiences of the displaced coastal communities of Bacolod. There is a strong inclination to do “local theology”—different strokes on different folks. Of the sample churches, only the Convention of Philippine Baptist Churches remained rigid in church education as it considered Baptist

principles (biblical authority, autonomy of the local church, priesthood of believers, the ordinances of communion and baptism, individual soul liberty, the office of the pastor and the deacon and separation of church and state). The Convention Baptists emphasized how mingling church education to sociopolitical and ecological realities could impede the Baptist principle on “separation of church and state”.

DISCUSSION

The direction of political participation of mainline churches in the Methodist tradition. The study had four mainline Protestant denominations within the Methodist spectrum: the United Methodist Church- Philippine General Conference, the United Church of Christ in the Philippines (an organic union of the Philippine Methodist Church, the Presbyterian Church, the Congregational Church, the United Brethren and Disciples of Christ), the Salvation Army and the Evangelical Methodist Church of the Philippine Islands (utilized for comparison relative to the United Methodist Church). The direction of Methodist spirituality has intertwined social action and Christian witness hand in hand in evangelism and service. This has been visible in its social principles, baptismal vows, and living out the Wesleyan mantra: “The world is my parish”. Referencing on the key informant interviews, mainline churches in the Methodist spectrum have integrated political participation in ecumenical initiative, as expressed in the key informant interviewees from an Evangelical Methodist church worker and a United Methodist minister of whom emphasized “to turn religion into a solitary one is to destroy it” and the need for ecumenical fellowships “to develop local theologies oriented in the experiences of parishioners”.

Mainline Protestant denominations in the Methodist spectrum are politically engaged through alliance-building and the establishment of group networks in challenging policies (not only coastal reclamation) that could harm the environment but place socio-ecological arrangements within the margins of

vulnerability. Such feat has included the struggle against Kaliwa Dam construction, the Philippine Mining Act, the defense of ancestral lands of the Mangyans and Lumads as well as integration with urban poor communities. A minister of the United Church of Christ in the Philippines from the key informant interview asserted the need for mainline Protestant churches to go outside their comfortable sanctuaries and enter the crucible of service to the masses. The minister also emphasized how Christian theology must be linked in the experiences of the urban poor, the peasantry and those who lay within the fringes of Philippine society.

Continuity and discontinuity in progressive church education programs of Bacolod mainline Protestant churches. The posture of church education programs and its pedagogy is crucial in rooting the progressive ethos and spirituality of mainline Protestant churches. The Spearman bivariate analysis of the study indicated a significant inverse relationship between progressive church education programs and political interest of mainline Protestant church-members relative to participation in anti-coastal reclamation movements.

Discontinuities of progressive church education programs are expressed in the case of the Convention of Philippine Baptist Churches on which themes on social justice and political participation—such as those articulated in the 1935 Baptist church school material *Eskuela Dominikal—Speaking the Truth* (*nagahambal sang kamatuoran*), *Helping the Poor* (*nagabulig sa makalooloy*), *Proclaiming Justice* (*nagampo sa katadlungan ukon katarungan*), *Corrupt or Abusive Moral and Spiritual Practices* (*pagpatuyang*)—have been absent or minimally integrated in current church education programs (Bunda, 1999, pp. 193-194). This is documented in the key informant interview with a Convention Baptist minister, “there is an inclination for Convention Baptists to frame church education solely in spiritual matters in the stead of realities which face the realm of society”.

Despite the decline of progressive church education in the Convention Baptists, other Protestant denominations in the mainline tradition persist to view church education as an extension of immersing church members in the crucible of struggle forged continually under pressing sociopolitical, economic and ecological realities. This traces back in the commitment to expression the mission of NCCP whose ecumenical formation was conceptualized in 1963: “Life in all its Fullness is what Jesus Christ lived and died for; life in a just, egalitarian, self-reliant, and sustainable society”. In the case of the United Methodist Church-Philippine General Conference, church education is perceived as an avenue to perform local theologies framed within the struggles and experiences of the people on which the church is situated. This tone is also carried in the United Church of Christ in the Philippines which has framed church education to be always contextualized for “different folks at different strokes”. On the other hand, for the Philippine Independent Church—church education should always be flexible to socioecological realities—accepting such flexibility as a “relevant way of being church”. With its emphasis on stewardship and acts of service, the Salvation Army perceives church education as a plug-in of doing church mission.

On Sparks’ psychological proximity hypothesis. Aaron Sparks’ psychological proximity hypothesis contends how an individual whose proximity is nearer in the vicinity of the problem being faced would be more likely to participate in political activism when compared to an individual whose vicinity is farther from the site. However as expressed in the Spearman bivariate analysis, there is a direct relationship between the proximity (distance of the church from the coastal reclamation site) and political activism in the context of progressive church education programs. Referencing to the key informant interviews of the study, the United Church of Christ in the Philippines- Bacolod City which is 12.6 km from the site of reclamation when compared to sample churches under the Convention of Philippine Baptist Churches—Banago Evangelical Church and Bacolod Evangelical Church (which are 1.4 km and 5 km

respectively), carry increments to participate in rallies and picket mobilizations against the coastal reclamation in Bacolod City. On average, descriptive analysis indicates how the posture of not participating politically has been high (40.268%) in the Convention of Philippine Baptist Churches— this is relative to its strata on a 60 out of 78 sample individuals. On the other hand, the posture to politically participate in anti-coastal reclamation movements has been evident in the United Church of Christ in the Philippines (37.58%) –56 out of 61 sample individuals.

On the disconnect between civic volunteerism and group networks to mainline Protestant political participation. The predictor category for group networks included two independent variables: (i) membership in a church-mass organization, and (ii) membership in an environmental organization. Both variables are binary since it carries the values of yes (for membership) and no (for non-membership) When fitted in the logistic regression model, the following variables express weak predictive capacity for determining the political participation of a mainline Protestant church-member in anti-coastal reclamation activities: as the p-value for church-based mass organization ($p = 0.254$) and environmental organization ($p = 0.147$) exceed the conventional 0.05 level of significance in the Wald's chi-squared test-statistic. Mirroring themes present in key-informant interviews, the instances of group networks have been present only in the ecumenical formations of the Philippine Independent Church and the United Church of Christ in the Philippines (which extends beyond the realm of mainline Protestantism and includes faith traditions within the parameters of the Roman Catholic and evangelical Protestant spectrum as nodes of mobilization).

On the disconnect between civic volunteerism and group networks to mainline Protestant church member's political participation, it is interesting to look into the posture of church affiliation and church polity. For instance, as expressed by Samillano (2022) in her report of anti-coastal reclamation responses in Bacolod,

only two mainline Protestant church denominations are members of the Banago Against Reclamation Movement (BARM), mainly, the United Church of Christ in the Philippines and the Philippine Independent Church. Thematic analysis of qualitative data obtained from key-informant interviews would indicate how both Protestant churches share the same theme on "recognition of victimization" as both churches would mobilize parishioners outside the comforts of their sanctuaries to address pressing socio-ecological issues. Referencing on the sample profile of these churches, both the United Church of Christ in the Philippines and the Philippine Independent Church are in full communion with each other: sharing theological perspectives, mission initiatives and endeavors for social work. Relative to church polity, both the United Church of Christ and the Philippine Independent Church operate in decentralized elements; the United Church of Christ is structured as congregational which gives autonomy to the congregation in decision-making endeavors ought to be pursued; such is also visible in the case of the Philippine Independent Church whose episcopal polity places it within the hands of the local parish or diocese to craft related-responses on community-based concerns. It is interesting to note that while mainline Protestant churches in the Methodist tradition: United Methodist Church and the Salvation Army have progressive church doctrinal stances, their participation in BARM has been absent for its connexional polity, which is centralized in a general conference. This problem has been present in the key informant interviewees from both churches of whom emphasized how connexionalism has made the local church dependent on policies and measures to be pursued by the general conference. Relative to the coastal reclamation in Bacolod, no denominational statements have been released from the United Methodist Church and the Salvation Army.

On church doctrine and existing gaps of the logistic regression model. The Hosmer-Lemeshow test was conducted to explore the goodness of fit of the candidate model to predict political participation of mainline Protestant

church-members in anti-coastal reclamation activities. As expressed in the final logistic regression model of the study, church doctrine, has a p-value ($p = 0.006$) which passes the 0.05 level of significance in the Wald's Chi-squared test statistic. The posture of church-doctrine in the sample mainline Protestant churches is a motivational factor crucial in determining an individual member's increment of participation. This is also reflected in the qualitative data of the study obtained from key-informant interviews of the sample churches. For instance, the rigidity of the Convention of Philippine Baptist Churches' doctrine—as it holds firm in Baptist distinctives—has resulted on few of its ministers and members to participate in anti-coastal reclamation initiatives. On the other hand, the progressive doctrinal stance and social principles of the United Methodist Church, Salvation Army, Philippine Independent Church and the United Church of Christ in the Philippines articulated richness in the arena of political participation—not solely limited in picketing and rallies but as well in prayer vigils, environmental stewardship, awareness campaigns through seminars and statement releases, and in humanitarian aid. For these mainline churches, there is an orientation to live doctrine and worship in acts of social and prophetic witness against systems and structures that continue to permeate abuse and exploitation. Despite these progressive themes, the connexional church polity of churches in the Methodist spectrum (Salvation Army and the United Methodist Church) makes it difficult for local churches to mobilize since they are dependent under centralized arrangements of their respective general conferences.

The logistic regression model was obtained from the data set sampled from a population size assumed to carry heterogenous characteristics, which is in the case of this research, different churches within the mainline Protestant tradition. Unequal allocation in stratified random sampling was pursued with an 8% margin of error to capture a representative sample on each stratum, this is to account how both the Convention Baptists and the United Church of Christ garner large proportions in the area of Bacolod City.

Referencing on the distribution of mainline Protestant churches in Western Visayas, the Convention of Philippine Baptist Churches and the United Church of Christ in the Philippines (mostly consisting of Presbyterian churches) have churches which densely populate the area due to the 1898 Comity Agreement which assigned mission work in Panay and Negros for the Baptists and the Presbyterians. The researcher of this study acknowledges the research gap on the sampling frame since it has assumed heterogeneity in mainline Protestant churches for the regression model. For further studies, the researcher recommends the need to provide a logistic regression model whose sampling frame treats mainline Protestant churches independently in the area of Bacolod. Future researchers could conduct a logistic regression analysis on an individual church denomination to grasp context-based lens for the posture and dynamics of mainline Protestant engagement in anti-coastal reclamation activities.

Recommendations for further research. Below are recommended areas for further study:

1. The study only focused on determining political participation in mainline Protestant denominations in Bacolod City, Negros Occidental. Considering how evangelicals Protestant denominations are also present in the said vicinity, further research could be conducted to evaluate political participation in anti-coastal reclamation movements within the said faith spectrum.
2. Considering how the significant Spearman correlations failed to qualify in the final logistic regression model, it is interesting for social science practitioners to look into these correlations—political interest, political awareness and proximity as motivational and demographic predictors that could influence political participation of an individual in anti-coastal reclamation movements.
3. There is a need to include document analysis particularly in assessing the posture of church education programs amongst

mainline Protestant denominations in Bacolod City, Negros Occidental. The research instrument utilized in this study only limited to key informant interviews and a self-administered survey.

4. Community organizers can further look into typologies in church-polity of mainline Protestantism: (i) congregational (the United Church of Christ and the Convention of Philippine Baptist Churches on which the local church is given autonomy in decision-making), (ii) episcopal (the Philippine Independent Church on which the local parish is the fundamental unit of the denomination), and (iii) connexional (as expressed in Methodist denominations of the study where a general conference acts as the supreme decision-making body of the church). While decentralized elements are integral under congregational and episcopal arrangements, centralization persists as a trend for Methodist denominations following a connexional form of church government; as such, there is an increment of difficulty for local congregations to develop policies framed within the context and struggles of their respective communities. The nature of church polity can be added on the church denominational profile.

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