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Correlation Analysis on Educational Level and Community Participatory Behavior in Grassroots Economy Promotion

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Abstract: This comparative correlational study employs quantitative research, utilising Interactionism Theory alongside principles of community engagement and grassroots economic promotion as the foundational framework for variable selection with causal linkages. This research seeks to analyse the association between educational attainment and community involvement behaviour in the promotion of the grassroots economy. The sample group consisted of 634 individuals chosen from 24 communities. The sample size was determined via the G*Power software. A multi-stage quota random sampling technique was utilised to comprehensively encompass the population throughout Thailand. The evaluation of the variables employed 12 sets of summated rating scales as measuring tools. All measurement sets were subjected to Confirmatory Factor Analysis, yielding an average Cronbach's alpha reliability coefficient of 0.82. The research findings corroborated all five hypotheses, presenting the principal results as follows. The educational attainment of community members exhibits significant variability and demonstrates a statistically significant positive link with participatory behaviour in grassroots economic promotion at the $p < .01$ level. The cohort with vocational certificate education exhibited a moderate correlation coefficient, whereas the cohort with higher vocational diplomas and bachelor's degrees demonstrated moderate to high correlation coefficients, particularly concerning variables associated with participation channels, information access, self-confidence, and favourable attitudes towards participation. The group with elevated educational attainment possessed wider networks for information access and exhibited greater engagement avenues. They demonstrated enhanced and more enduring attitudes and confidence regarding engagement in community economic activities. The multiple regression analysis by predictor sets indicated that the variables with consistently high beta coefficients were sense of community attachment ($\beta = 0.61$), support from community leaders ($\beta = 0.38$), perceived benefits and rewards ($\beta = 0.48$), and participation channels ($\beta = 0.45$).

Keywords: Correlation Analysis, Education Level, Participatory Behavior, Grassroots Economy.

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1. Introduction

The current global economic and social transformations, which emphasise economic growth, frequently lead to inequality and the marginalisation of specific populations.

The notion of grassroots economic development has thus arisen as a significant alternative and an essential instrument for promoting sustainable and inclusive growth. The importance of a grassroots economy is found not only in income generation but also in bolstering the resilience and self-sufficiency of local communities (Soicjit et al., 2022). This method utilises local resources, indigenous knowledge, and social capital to mitigate inequality, divert revenue into local areas, and enhance communities' ability to manage external volatility successfully.

Grassroots economic development is an essential element in promoting sustainability at the local level, particularly for inclusive development. The grassroots economy encompasses economic activity initiated by local communities, primarily reliant on locally sourced resources, employment generation, and the circulation of income within the community (Kelly et al., 2012). Community engagement is a crucial element contributing to the efficacy and success of grassroots economic promotion. Communities contain knowledge and expertise of local surroundings, thereby directly benefiting from development (Anusonphat, 2024). Community engagement may vary based on numerous reasons. The education level of the populace is a noteworthy feature that may exert a substantial influence.

Education is essential for enhancing human resources and promoting societal advancement (Hübel, Stan, & Tasențe, 2023). Investing in education enhances human capital by broadening knowledge, cultivating intellectual and critical thinking abilities, and granting access to contemporary information. These characteristics collectively enhance individual knowledge of concerns, promote rational decision-making, and encourage engagement in diverse social activities (Kaner, 2014). In the realm of community development engagement, educational attainment can enhance citizens' comprehension of their rights, responsibilities, and civic obligations. It also improves their communication abilities, enabling individuals to assume leadership roles or launch projects that foster local grassroots economic growth (Anglin, 2017).

Notwithstanding the current literature highlighting the significance of community engagement in sustainable development (Meadowcroft, 2004) and the function of education in enhancing individual capabilities (Singh & Agarwal, 2024), investigations into the causal nexus and repercussions between educational attainment and community participation behaviours in the advancement of grassroots economies remain an area necessitating further inquiry. This is particularly relevant when examining social inequalities, cultural heterogeneity, economic circumstances, and distinct power dynamics of specific regions. Research by Junker and Smith (2017) in Southeast Asia revealed that communities with elevated average education levels tended to possess more robust economic groupings in the form of cooperatives and benefited from enhanced access to funding sources for livelihoods. Conversely, the study by Perez et al. (2015) indicated that in rural Africa, despite increasing educational attainment, the absence of supporting infrastructure, such as market access or network linkages, severely limits economic engagement within communities. These instances suggested that the impact of educational attainment on grassroots economic involvement may be intricate and contingent upon supplementary supportive factors. In developing countries, fostering the grassroots economy—through the establishment of small and medium-sized enterprises (SMEs) in rural areas, the advancement of sustainable agriculture, or the promotion of eco-tourism—frequently faces significant obstacles

to comprehensive community engagement (Yamashita, 2011). Despite the initiation of development projects intended to benefit communities, a deficiency in practical knowledge concerning enterprise management, as well as a lack of awareness regarding rights to access and utilise community resources, may hinder lower-educated communities from fully leveraging these opportunities (Kwon, Heflin, & Ruef, 2013). This data corroborates the notion that poverty traps are frequently associated with insufficient educational opportunities and restricted access to knowledge. It limits the economic decision-making ability of households and communities (Watts, 2020). In certain foreign nations, such the Socialist Republic of Vietnam and the Republic of Indonesia, ongoing investments are directed towards the advancement of rural education. Research indicates that communities with elevated average education levels tend to exhibit effective engagement in the design and execution of local economic development initiatives (Blakely & Leigh, 2013). These communities can form and administer community enterprises. They can exhibit resilience in adapting to economic change. The crucial element augmenting this accomplishment is the capacity to acquire new knowledge, implement novel insights, and establish robust social and economic networks. All represent significant results of spending in education (Juma & Yee-Cheong, 2005). This research is crucial for comprehending the relationship between educational attainment and community engagement behaviours in the promotion of grassroots economies. It aids in identifying the mechanisms and factors that modulate the impact of educational attainment on involvement across various dimensions. Participation encompasses not only the frequency of attending meetings or activities but also the quality of engagement, including the capacity to articulate creative opinions, propose novel ideas, collaboratively solve problems, and foster economic innovations within the community (Gibson-Graham & Roelvink, 2016). This project elucidates theoretical knowledge gaps concerning the interplay between human capital and social capital in grassroots economic growth. This yields specific and actionable policy recommendations.

The literature review highlights a substantial research deficit. Despite numerous studies recognising the positive correlation between educational attainment and participation, there remains a deficiency of comprehensive research elucidating the “mechanisms” by which educational levels affect participation behaviours through socio-psychological factors such as self-efficacy, aspiration, or social trust. Furthermore, the majority of current research is predominantly quantitative, focussing solely on the frequency of participation. The qualitative aspects that indicate the “nature” and “intensity” of such participation are overlooked. The impact of education levels is likely non-linear and may interact with many contextual factors.

This practical research utilises the Interactionism Theory framework proposed by Magnusson and Magnusson (2013) and Endler (2014) to uncover causal and dependent variables associated with community involvement behaviours. The causal variables are categorised into three primary groups: 1) Psychological Traits, 2) Situational variables, and 3) Psychological States. The application of Interactionism Theory in examining community engagement aligns effectively with the Theory of Planned Behaviour. It can systematically elucidate how public attitudes, beliefs, and perceptions, correlated with educational attainment, may influence motivation and behaviours pertaining to participation in the grassroots economic promotion. This comprehension aids in formulating strategies and pragmatic methods for promoting sustainable and secure

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community participation, in alignment with the United Nations Sustainable Development Goals, particularly SDG 4: Quality Education and SDG 11: Sustainable Cities and Communities (Skaidrė, 2020).

2. Literature Review

The grassroots economy notion is an economic framework that prioritises internal growth. The community's potential, resources, and indigenous knowledge are seen as the primary catalysts (Anglin, 2017). The principal objective is to fortify the economic underpinnings at the home and community tiers, diminish external reliance, encourage self-sufficiency, and enhance equity in the allocation of income and economic prospects (Graddy & Wang, 2009). The grassroots economy contrasts with the mainstream economic system, which frequently emphasises centralised control and dependence on the global market system.

The fundamental components of the grassroots economy include various economic activities that reflect the unique characteristics of each community. This include community enterprises, enhancing local agricultural goods and crafts, fostering eco-tourism and cultural tourism, and attaining self-sufficiency in fulfilling basic requirements. Moreover, promoting the circulation and retention of funds created from production and consumption within the community's economy is regarded as a fundamental component (Vergragt, Akenji, & Dewick, 2014).

In "Rural Development: Putting the Last First," Chambers (2014) introduced a development paradigm that prioritises marginalised individuals and local resources. This aligns with the concepts of the grassroots economy. He emphasised utilising the expertise and capabilities of local individuals to oversee resources and promote economic growth in a manner that is sustainable and attuned to the genuine needs of the community. According to Navarro (2000), genuine economic development necessitates the enhancement of individuals' skills and the creation of options, which includes equitable access to local economic possibilities for all participants. This viewpoint transcends simple income expansion. It also concurs with Wangari (1994) in "Empowerment: The Politics of Alternative Development." He suggested an alternative development strategy centred on empowering communities to plan and execute their economic activities, grounded in the conviction that communities had the most profound understanding of their own needs. Furthermore, in Participatory Learning and Action: A Trainer's Guide, Pretty (1995) underscored the significance of participation and collaborative learning processes within communities to ascertain economic potential, manage resources, and cultivate local firms. All are essential elements for the success of the grassroots economy.

The promotion of the grassroots economy has garnered heightened attention due to its resilience against macroeconomic volatility. It can promote more equal income distribution and facilitate environmental conservation and the preservation of local culture (Hadriani, Gelgel, & Wibawa, 2021). In the Asian context, while the term "grassroots economy" may not be explicitly employed, research such as Kabeer (2005) in The Social Relations of Microfinance: Women's Empowerment and the Politics of Protection in Bangladesh demonstrates the fortification of household-level grassroots economies. It establishes a foundational basis for grassroots economic growth. This illustrates how the empowerment of marginalised populations via economic collective

processes can result in sustainable grassroots economic development. In Towards Sustainable Communities: Resources for Citizens and Their Governments, Roseland (2012) presented instances of municipalities fostering sustainable local economies, a fundamental component of grassroots economies, by diminishing reliance on fossil fuels and endorsing local organic agriculture. These instances clearly demonstrate the ability of the grassroots economy to address global concerns, including climate change and local resource security.

The grassroots economy concept is a versatile framework that may be tailored to the specific situation of each locality. The essence resides in empowering communities and fostering their involvement in determining the trajectory and advancing the economic development of their respective regions. The objective is to cultivate local resilience, sustainability, and equity.

2.1. Community Participation

Community engagement is an essential step that is broadly acknowledged in development. It denotes the engagement of community people in multiple phases of development, including problem identification, planning, execution, monitoring, assessment, and shared accountability for the results (Pretty, 1995). Participation is seen as the cornerstone of sustainable development and is recognised as a crucial element in the success of numerous development initiatives (Cooke, 2004). The principal objective of participation is to empower communities, allowing them to make decisions and exert influence over development efforts that impact their lives (Cornwall, 2008).

Participation levels and types can differ significantly and can be classified based on the degree of involvement. In the article "A Ladder of Citizen Participation," Arnstein (2019) introduced the concept of the Ladder of Citizen Participation. Participation is categorised into eight tiers, from the lowest level, which lacks decision-making capacity, to the highest level, citizen control, where individuals possess all decision-making ability. This notion underscores that authentic engagement necessitates decentralisation and the delegation of decision-making authority to the populace. Arnstein's illustrations of minimal participation depict scenarios in which the community's involvement is restricted to merely attending meetings or endorsing initiatives, devoid of any engagement in decision-making processes. Token participation frequently results in diminished ownership and, ultimately, the long-term collapse of initiatives.

In Whose Reality Is Considered Valid? Chambers (1993) asserted that the principles of Participatory Rural Appraisal (PRA) and Participatory Learning and Action (PLA) facilitate community-led analysis of issues, planning, and execution of development initiatives. The development practitioners function solely as facilitators or catalysts. In India, Chambers demonstrated that when communities possess tools and methodologies for self-assessment, such as community resource mapping or ecosystem analysis, they can discern their own needs and formulate solutions that are significantly more appropriate to their context than those proposed by external experts. This contributes to the formulation of agricultural development strategies or sustainable water management systems.

Community involvement in grassroots economic development is crucial since it utilises local indigenous knowledge, addresses the community's genuine needs, and cultivates a sense of ownership (Pylypenko et al., 2024). Moreover, engagement fosters the development of "social capital" inside the community. It encompasses trust,

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conventions, and networks that are vital for collaboration and promoting economic innovation (Thompson, 2018). In numerous countries, community enterprises thrive due to the active involvement of members in decision-making, management, and equitable distribution of benefits, which are essential for producing goods and services that effectively and sustainably meet local market demands (Smith, 2008).

2.2. The Role of Education in Development and Participation

Education is widely acknowledged as a vital element in enhancing "Human Capital," which underpins sustainable economic and social growth (Šlaus & Jacobs, 2011). Investment in education enhances knowledge, skills, critical thinking abilities, and access to information. All are crucial for making informed decisions, adapting to change, and participating effectively in social and economic endeavours.

The essay "Investment in Human Capital" by Schultz (1961) and "Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education" by Pyatt (1966) both assert that investment in education yields substantial long-term benefits. This occurs at both the individual level, via increased income, and at the national level, through comprehensive economic growth. The findings of Psacharopoulos and Patrinos (2018) indicate that the return on investment in primary education is frequently greatest in emerging nations, since it establishes a crucial foundation for the essential demographic segments of the country. Flores-Crespo (2007) asserted that education enhances an individual's "competence." It empowers people to lead the life they desire and to engage actively in economic and social endeavours. In grassroots economies, when community people have sufficient knowledge and abilities, they are more adept at recognising new business opportunities and comprehending intricate industrial processes. Both are essential for fortifying local economies. In "Pedagogy of the Oppressed," Freire (2020) elucidates that education cultivates critical thinking and consciousness of one's social standing. It may also result in the alteration of inequitable systems and enhanced political and social engagement.

In addition to information and skills, education fosters psychological attributes such as self-confidence and a favourable disposition towards learning and adaptation (Zimmerman & Schunk, 2014). This establishes a crucial basis for community engagement.

2.3. Relationship between Educational Level and Community Participatory Behavior in Grassroots Economy Promotion

Numerous research have aimed to investigate the correlation between educational attainment and civic engagement across various dimensions. This link is not simply a direct correlation. It is influenced by various aspects, including personal psychological characteristics, situational elements, and psychological states triggered by particular settings. A good comprehension of these aspects can elucidate the dynamics of participation more effectively (Van Zomeren & Iyer, 2009).

Community Participatory Behavior in Grassroots Economy Promotion denotes the acts or behavioural expressions of community members intended to participate in the advancement of their local grassroots economy. This include collaboration, resource allocation, engagement in activities, articulation of viewpoints, and participation in the decision-making and administration of economic initiatives or projects within their locality. The objective is to fortify the local economy sustainably. This behaviour encompasses four characteristics, aligned with the community's potential and

circumstance. Participation in economic activities represents the fundamental degree of engagement, frequently shaped by accessibility and awareness of advantages. The expression of thoughts signifies active engagement, necessitating self-assurance and effective communication abilities. Investment of personal resources (time, labour, capital) reflects the degree of commitment and faith in the undertaking. Participation in management and leadership signifies the pinnacle of participation and necessitates skills, leadership attributes, and community backing. Consequently, the correlation between educational attainment and community active behaviour in grassroots economic advancement is not manifested through a singular component. Rather, it is an intricate interaction influenced by various circumstances. This study emphasises an empirical analysis to enhance comprehension of these processes.

This study employs Endler & Magnusson's (1977) Interactionism Theory and Ajzen's (1991) Theory of Planned Behaviour to find causal variables associated with three primary elements, outlined as follows:

2.4. Factors of Psychological Traits and Community Participation

A positive attitude towards involvement denotes the acknowledgement and conviction that engagement provides advantages to oneself, one's family, and the community. It is a cognitive force that compels individuals to opt for cooperation, assistance, or participation in diverse processes (Ajzen, 1991). Multiple research indicate that a favourable disposition towards public activities fosters an appreciation for communal gain over self-interest, resulting in authentic and sustained engagement (Ajzen et al., 2018).

Self-confidence, as articulated by Greenacre, Tung and Chapman (2014), denotes the conviction that individuals engage in actions solely when they possess faith in their capacity to regulate and effectively govern such behaviour. In the realm of community engagement, self-confidence denotes the conviction that an individual can engage, articulate thoughts, or contribute to the management of diverse projects without experiencing feelings of inferiority or devaluation.

Altruistic Value is seen as an element of Social Capital. Putnam (2000) and Coleman (1988) posited that social networks and norms that encourage mutual assistance create trust, which underpins cooperation for the collective benefit. This is especially pertinent in rural societies or small groups in Thailand (Narayan & Pritchett, 2000).

2.5. Factors of Situations and Community Participation

Channels of participation denote the avenues and methods via which citizens engage in community activities or decision-making processes (Uphoff, 2000). Communities that offer varied and accessible communication channels, such as community meetings, professional organisations, or volunteer organisations, facilitate equitable access to developmental activities and diminish disparities in information access (Narayan-Parker, 2002). Consequently, the existence of many involvement channels aligned with the community's lifestyle is a crucial factor that enhances individuals' participative behaviour (Yuangngoen, Sakdapat, & Ngamcharoen, 2025).

Access to information and news denotes the degree to which individuals may adequately and swiftly obtain information pertinent to community economic growth (Rogers, 2011). Development Communication posits that knowledge serves as a strategic resource for mitigating uncertainty and equipping citizens to make informed participation decisions (Warburton, 2013).

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Assistance from community leaders constitutes a significant situational aspect as per the principles of Community Leadership and Social Capital (Coleman, 1988; Putnam, 2000). Community leaders often function as intermediaries and social organisers, facilitating relationships between external agencies and local residents.

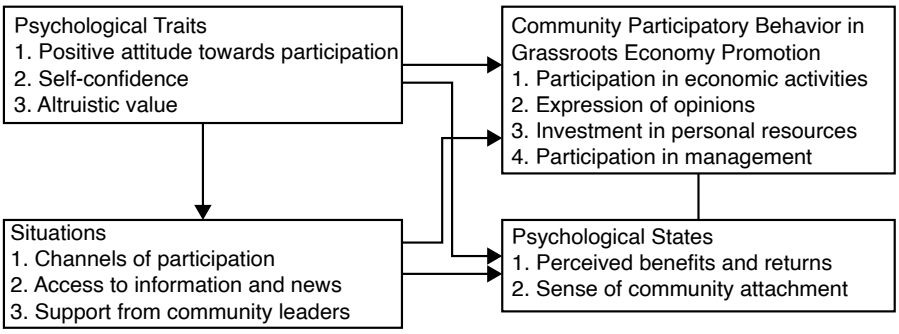
2.6. Factors of Psychological States and Community Participation

Perceived Benefits and Returns are concepts associated with Motivation Theory and Cost–Benefit Analysis concerning community engagement. It underscores that the degree of an individual's active behaviour is contingent upon their evaluation of the potential benefits and returns of engagement (Kaufman & Dilla Alfonso, 1997; Tsephe & Eyono Obono, 2013). 3.2) Community Attachment is a concept grounded in the ideas of Social Capital (Putnam, 2000) and Place Attachment (Hidalgo & HernÁNdez, 2001). A sense of belonging to the community cultivates trust, ownership, and a communal commitment to safeguarding or enhancing community resources.

2.7. Biosocial Background Characteristics

These are key statistics regarding the respondents, illustrating their personal context through demographic information, which serve as essential variables for statistical research. Examples encompass gender, age, marital status, educational attainment, occupation and job title, residence, and monthly income. The Theory of Planned Behaviour methodically elucidates the links in this study. Rather than directly influencing participative behaviour, educational attainment may serve as a fundamental factor that strengthens the three primary components. Higher education fosters a more positive disposition by allowing individuals to recognise intricate advantages. It improves comprehension of societal standards and communal expectations. Significantly, perceived behavioural control can be enhanced by fostering self-confidence and developing abilities in obtaining information and engagement avenues. When these three components are reinforced, they culminate in the intention to engage, which finally materialises as actual participation behaviour. A study of pertinent literature and research indicates that community involvement in promoting the grassroots economy is contingent upon aspects encompassing psychological characteristics, circumstances, and mental states. This can be distilled into a conceptual framework diagram (Figure 1) illustrating the causal linkages among various factors. It additionally functions as a framework for hypothesis testing and the evaluation of study findings.

Figure 1: Conceptual Framework.



2.8. Hypotheses

H1: The groups of psychological traits, situations, and psychological states are positively correlated with community participation behavior in the grassroots economy promotion entirely with statistical significance at the level of $p < .01$.
H2: Different levels of education among community members are positively correlated with the variables in the group of community participatory behavior in the grassroots economy promotion with statistical significance at the level of $p < .01$.
H3: All eight independent variables can predict community participatory behavior in the grassroots economy promotion for the overall group and subgroups with different levels of education. The prediction criterion of 5% is used and key predictors that are statistically significant can be identified.
H4: When using all variables (eight variables) as a combined set, the predictive power for all aspects of community participatory behavior in the grassroots economy promotion increases significantly compared to using each of the three separate predictor sets.
H5: For the overall group with different education levels, the set of all eight independent variables can predict at least 40% of the variance in community participatory behavior in the grassroots economy promotion.

3. Methodology

3.1. Research Design and Ethical Considerations

This research is a quantitative study utilising a comparative correlational design of observable variables (Shouxin, 2024). The aim is to examine the correlation between educational attainment and community engagement in grassroots economic development. The research findings elucidate the strength of correlations, causal linkages among variables, and facilitate precise forecasts of the genuine causative components underlying diverse biosocial backgrounds. This would thus enable the formulation of development strategies customised for various groups, thereby providing recommendations to improve community participative behaviour in promoting the grassroots economy. These findings can be effectively utilised by pertinent agencies and stakeholders.

This study project has received ethical approval from the University of the Thai Chamber of Commerce, under certification number Expedited021/A04035. The research team meticulously complied with ethical norms during the research process, upholding the three fundamental principles of human research ethics: respect for humans, beneficence and non-maleficence, and fairness. The rights of research participants were maintained at the utmost level. All participants provided their informed and voluntary consent free from coercion or undue influence. The confidentiality and anonymity of personal information were meticulously safeguarded. All data gathered in this study was utilised exclusively for research purposes.

3.2. Sample

The research sample comprised individuals from communities across the six regions of Thailand. The provinces were selected based on their highest gross provincial product (GPP) within each area. The criteria for community selection encompassed communities situated in municipal districts (Mueang districts), local districts, or subdistrict municipalities/villages that possessed active community

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enterprises. The sampling technique was executed consistently and proportionally to guarantee extensive representation across a substantial sample size. Furthermore, participants were mandated to possess at least an occupational certificate or a higher educational qualification.The researchers determined the requisite sample size utilising G*Power software, establishing a confidence level of 95% and an acceptable margin of error of 5%. The computation revealed a necessary minimum sample size of 586 people (Kang, 2021). The researchers augmented the sample size by 5% to address for incomplete responses. A multi-stage quota random sampling technique was utilised, comprising the subsequent steps. Thailand is partitioned into six regions: North, Northeast, West, Central, East, and South. Approximately 100 participants were selected from each location to guarantee national contextual representation. A total of 24 communities were selected, comprising 6 from Mueang districts and 18 from local districts or municipalities with active community enterprises. 3) Participants were categorised into two age cohorts: those born between 1964 and 1981, and those born between 1980 and 1997. The overall sample size comprised roughly 615 persons.

3.3. Data Collection

For the data collection in this research, the researchers arranged appointments with community leaders, including the provincial governor, district chief officer, sub-district headman, village headman, mayor, municipal mayor, and local wisdom scholars, to facilitate a systematic data collection process and effectively reach the target population. The researcher subsequently performed fieldwork and individually gathered data from the sample group, adhering to the established methodology and the inclusion criteria for key informants. A total of 652 participants engaged in the data collecting. Following a review for completeness, 634 fully completed surveys were preserved, while 18 incomplete responses were deleted. Table 1 presents the essential biosocial background characteristics of the respondents.

Table 1: Biosocial Background Characteristics of the Samples.

Data Type	Biosocial Background Characteristics of the Samples	
Sample group	The data were collected from a total of 634 persons from 24 communities in 6 regions.	
Gender	293 men (46.20%)	341 women (53.80%)
Average age (years)	49 years 9 months (S.D. = 7.12)	
Age	Elder (>49 years) 333 persons (52.50%)	Younger (≤49 years) 301 persons (47.50%)
Status	Single for 412 persons (65.00%)	Married for 222 persons (35.00%)
Education level	Vocational Certificate for 194 persons (30.60%)	
	Higher Vocational Certificate for 176 persons (27.80%)	
	Bachelor's Degree for 264 persons (41.60%)	
Occupation	Working with Government Agencies for 177 persons (27.90%)	
	Working with Private Agencies for 131 persons (20.70%)	
	Trading for 92 persons (14.50%)	
	Garden owners/farmers 143 persons (22.60%)	
	Entrepreneurs/Self-employed for 91 persons (14.40%)	
Participation in community activities	12 times or more per year for 204 persons (32.20%)	
	More than 6 times per year for 295 persons (46.50%)	
	Less than 6 times per year for 135 persons (21.30%)	
Participation in supporting or promoting the grassroots economy	Supporting more than 6 times per year for 282 persons (44.50%)	
	Supporting more than 12 times per year for 352 persons (55.50%)	

Note: Missing values are not included.

3.4. Instruments

Table 2: Quality of Questionnaires in the Research.

Questionnaires	No	α	Confirmatory Factor Analysis						
			χ^2	df	p-value (>0.05)	RMSEA (≤0.06)	CFI (≥0.95)	TLI (≥0.95)	SRMR (≤0.08)
Participation in community economic activities	14	0.84	62.95	51	0.07	0.06	0.97	0.96	0.06
Expression of opinions	12	0.82	54.81	46	0.06	0.05	0.96	0.95	0.05
Investment in personal resources	13	0.83	58.72	50	0.07	0.06	0.98	0.97	0.05
Participation in management	12	0.81	56.65	44	0.06	0.05	0.96	0.96	0.05
Perceived Benefits and Returns Expression of opinions	12	0.82	57.79	45	0.06	0.05	0.96	0.95	0.05
Sense of Community Attachment	13	0.84	58.85	52	0.07	0.06	0.97	0.96	0.05
Channels of participation	11	0.82	50.18	43	0.06	0.05	0.95	0.95	0.05
Access to information and news	12	0.84	56.96	42	0.06	0.05	0.96	0.96	0.05
Support from community leaders	10	0.79	50.83	37	0.05	0.06	0.95	0.95	0.04
Positive attitudes towards participation	12	0.80	55.94	45	0.07	0.05	0.97	0.96	0.05
Self-confidence	12	0.83	56.86	42	0.06	0.06	0.96	0.95	0.05
Value of helping one another	10	0.81	49.87	38	0.05	0.05	0.95	0.95	0.04

Note: *Confirmatory factor analysis used a passing criterion of 3 out of 5 criteria or more, especially when the $\chi 2$ value was not statistically significant. **This research gives more importance to the t value than the r value, with the selection criteria being $t \geq 2.00$ and $r \geq 0.20$. *** The t-values and r-values are shown in Appendix A of the complete research report.

Twelve sets of measures were developed by the researchers through a literature analysis, incorporating relevant concepts and theories, as well as prior research that created tools for assessing community participation in grassroots economic matters. The original instrument comprised 248 items and functioned as a summated rating scale. The claims were articulated as sentences with six response levels, from “most true” to “not true at all,” and were self-reported by the participants (Chomeya, 2010). To mitigate any bias from the sequence of responses, the researchers varied the arrangement of the question items in each batch. Prior to finalising the primary instrument, participants were mandated to complete a screening questionnaire evaluating their fundamental understanding of grassroots economics and community engagement. This measure was essential to guarantee that only persons possessing pertinent information or direct engagement were chosen. Individuals who failed to satisfy the screening requirements were systematically excluded. To evaluate the instrument’s quality, the researchers performed a pilot test with 160 individuals from communities resembling the target demographic. The researchers subsequently assessed content validity by consulting five specialists in behavioural sciences and community development. These specialists evaluated each item for clarity and consistency with the research objectives in context. Following the initial round of expert evaluations, the researchers amended the items in accordance with the input and resubmitted them for a subsequent assessment. The Index of Item-Objective Congruence (IOC) for each item varied between 0.80 and 1.00 (Turner & Carlson, 2003). The researchers conducted an additional analysis of item discrimination employing the Independent Sample t-test to get the t-ratio for both sets of instruments. A strategy of 30% was employed, and items were chosen if their t-values were equal to or greater than 2.00. Furthermore, the item-total correlation coefficient was determined by correlating each individual item score with the overall score, removing the respective item. Items with r-values exceeding 0.20 were preserved. In the event of inadequate items in any dimension, precedence was accorded to those with elevated t-values, so guaranteeing thorough coverage of the operational definition

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of each variable. All instrument sets underwent Confirmatory Factor Analysis (CFA) for Second Order Factor Analysis to evaluate construct validity (Muthén & Muthén, 2007). The model fit was deemed acceptable if it satisfied a minimum of three out of the following five criteria: 1) Chi-square Statistics (Jöreskog, Sörbom, & Du Toit, 2001). 2) Root Mean Square Error of Approximation (Browne & Cudeck, 1993) 3) Comparative Fit Index (Bentler, 1990) and 4) Tucker-Lewis Index (Hu & Bentler, 1999) 5) Standardised Roof Mean Square Residual (Hu & Bentler, 1999). Upon concluding all validations, the researchers assessed the instrument's reliability. The findings indicated that all measures exhibited Cronbach's alpha coefficients between 0.79 and 0.84 (Raykov, 1997), which are deemed acceptable according to academic criteria (refer to Table 1).

3.5. Data Analysis

This research employed two types of statistical methods for data analysis as follows:

First Type: Statistics used for evaluating the quality of questionnaire items, which include; 1) Independent – Sample t-test (Sedgwick, 2010) and Pearson's Correlation Coefficient Analysis (Sedgwick, 2012) and 2) Confirmatory factor analysis (Harrington, 2009).

Second Type: Inferential statistics used for hypothesis testing and data interpretation, which include; 1) Correlation Analysis, applying Cohen's three-level correlation strength criteria (Cohen, 1982) and 2) Multiple Regression Analysis using both the Enter and Stepwise methods. Multiple predictors are used to predict each dependent variable individually. The analysis employed a 5% criterion for predicting significant variance (Stolzenberg, 2004).

4. Results

The examination of the interrelations among variables in the total sample (N=634) (Table 3) indicated that the majority of variables exhibited significant positive correlations at the $p < .01$ level. This corroborates Hypothesis 1, which asserted that the independent variable groups—specifically, psychological traits, situations, and psychological states—exhibit positive correlations with the dependent variable group. This indicates that an increase in one variable is generally correlated with an increase in another variable in the same direction. The principal conclusions for the dependent variable group are as follows. The community participatory behaviours in grassroots economic promotion (sub-variables) exhibited a positive association with one another at moderate to high levels, with all correlations being statistically significant. Participation in economic activities (Variable 1) exhibited a robust link with the expression of opinions (Variable 2), evidenced by a correlation coefficient of $r = 0.653$, $p < .01$. This is seen as a significant association. Furthermore, engagement in economic activities (Variable 1) exhibited a moderate to strong correlation with personal resource investment (Variable 3) ($r = 0.590$, $p < .01$) and participation in community management (Variable 4) ($r = 0.594$, $p < .01$). The four elements of community participative behaviour were distinctly aligned in a uniform way. Individuals demonstrating significant engagement in one domain typically displayed elevated levels of activity in additional domains.

However, when analysing the mean and standard deviation (SD) of community involvement behaviours in grassroots economic promotion for the entire sample. The results are as follows. 1) Participation in economic activities (Variable 1) yielded a mean score of 55.16 (SD = 8.40), signifying that respondents exhibited a comparatively

elevated level of engagement in economic activities. The mean score for the expression of opinions (Variable 2) was 51.02 (SD = 7.56), indicating a moderate to high range. 3) Personal resource investment (Variable 3) yielded a mean score of 54.57 (SD = 9.57), marginally exceeding the standard average, indicating a commendable level of resource-based engagement. Participation in community management (Variable 4) yielded a mean score of 52.32 (SD = 7.49), signifying that respondents exhibited a relatively high level of engagement in the community management process.

Table 3: Mean, Standard Deviation, and Correlation coefficients of variables in the aggregate group (N=634).

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	55.16	8.40	1											
2	51.02	7.56	.653**	1										
3	54.57	9.57	.590**	.575**	1									
4	52.32	7.49	.594**	.591**	.542**	1								
5	52.41	4.52	.535**	.548**	.586**	.521**	1							
6	53.19	6.48	.540**	.403**	.403**	.437**	.491**	1						
7	55.28	5.56	.467**	.328**	.318**	.493**	.516**	.530**	1					
8	57.56	4.61	.456**	.274**	.385**	.385**	.423**	.515**	.602**	1				
9	46.28	8.72	.305**	.280**	.274**	.210**	.142**	.208**	.214**	.223**	1			
10	58.41	7.35	.508**	.565**	.512**	.549**	.557**	.591**	.425**	.512**	.537**	1		
11	54.45	8.62	.363**	.292**	.358**	.326**	.304**	.412**	.451**	.578**	.255**	.402**	1	
12	43.54	9.45	.134**	.205**	.145	.213**	.241**	.239**	.238**	.226**	.238**	.245**	.213**	1

Note: *p<.05, **p<.01

Variables 1: Participation in community economic activities, 2: Expression of opinions, 3: Investment in personal resources, 4: Participation in management, 5: Perceived Benefits and Returns, 6: Sense of Community Attachment, 7: Channels of participation, 8: Access to information and news, 9: Support from community leaders, 10: Positive attitudes towards participation, 11: Self-confidence, 12: Value of helping one another

The correlation analysis results among respondents with occupational certificate education (Table 4) indicated the following. 1) Personal resource investment (Variable 3) had a moderate association with engagement in economic activities ($r = 0.564$, $p < .01$) and involvement in community management ($r = 0.528$, $p < .01$). This suggests that persons prepared to allocate personal resources are more inclined to engage in community management. Access to information (Variable 8) shown a correlation with channels for participation (Variable 7) ($r = 0.521$, $p < .01$). It indicates that those with superior access to knowledge recognise greater opportunities for engagement. Self-confidence (Variable 11) exhibited a moderate connection with both sense of community attachment ($r = 0.398$, $p < .01$) and avenues for participation ($r = 0.409$, $p < .01$). This suggests that self-confidence correlates with both the perceived avenues of engagement and the sense of community belonging. Conversely, support from community leaders (Variable 9) exhibited minimal or non-significant correlations with the majority of factors associated with community participation in grassroots economic promotion, with the exception of a low-level association with access to information ($r = 0.247$).

The correlation analysis results among respondents possessing a Higher Vocational Certificate education (Table 5) indicated the following findings. 1) Personal resource investment (Variable 3) had a robust link with engagement in economic activities ($r = 0.596$, $p < .01$) and a modest correlation with both the articulation of viewpoints and involvement in community management ($r = 0.523$, $p < .01$). This indicates a behavioural tendency within this group marked by a willingness to exert effort, allocate resources, and participate in community management. Channels for participation (Variable 7)

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and access to information (Variable 8) shown a robust association (r = 0.611, p < .01). Self-confidence (Variable 11) had a moderate to strong association with access to knowledge (r = 0.594, p < .01) and avenues for engagement (r = 0.504, p < .01).

Table 4: Mean, Standard Deviation, and Correlation Coefficients of Variables among Vocational Certificate Group (N=194).

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	54.27	7.39	1											
2	52.12	9.52	.495**	1										
3	54.59	7.57	.564**	.415**	1									
4	53.13	5.48	.372**	.373**	.528**	1								
5	52.28	4.92	.417**	.254**	.412**	.389**	1							
6	52.32	6.45	.324**	.247**	.478**	.341**	.376**	1						
7	48.27	4.51	.395**	.252**	.335**	.436**	.393**	.419**	1					
8	45.59	5.56	.310**	.184*	.176**	.335**	.342**	.352**	.521**	1				
9	39.21	8.77	.038	.139	.157**	.121	.153**	.113	.156**	.247**	1			
10	49.84	5.52	.141**	.195**	.179**	.299**	.222**	.276**	.323**	.265**	.185**	1		
11	56.56	7.61	.345**	.323**	.294**	.264**	.250**	.398**	.409**	.221**	.203**	.325**	1	
12	40.52	9.63	.070	.052	.087	.065	.050	.243**	.139	.297**	.011	.204**	.120**	1

Note: *p<.05, **p<.01
Variables 1: Participation in community economic activities, 2: Expression of opinions, 3: Investment in personal resources, 4: Participation in management, 5: Perceived Benefits and Returns, 6: Sense of Community Attachment, 7: Channels of participation, 8: Access to information and news, 9: Support from community leaders, 10: Positive attitudes towards participation, 11: Self-confidence, 12: Value of helping one another

Table 5: Mean, Standard Deviation, and Correlation Coefficients of Variables among the Higher Vocational Certificate Group (N=176).

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	56.12	7.41	1											
2	53.25	6.48	.413**	1										
3	57.73	8.57	.596**	.523**	1									
4	54.05	5.65	.427**	.358**	.527**	1								
5	53.04	6.84	.436**	.362**	.416**	.392**	1							
6	54.15	5.27	.474**	.397**	.473**	.384**	.464**	1						
7	52.27	4.59	.505**	.323**	.424**	.532**	.571**	.579**	1					
8	54.53	5.63	.463**	.246**	.419**	.427**	.437**	.514**	.611**	1				
9	39.24	9.72	.145	.079	.235**	.153*	.134	.275**	.257**	.245**	1			
10	48.47	4.54	.290**	.251**	.404**	.382**	.312**	.328**	.475**	.623**	.224**	1		
11	56.52	7.61	.405**	.206**	.361**	.364**	.349**	.543**	.504**	.594**	.242**	.407**	1	
12	43.48	9.32	.136	.137	.078	.169*	.131	.255**	.258**	.143	.189*	.176*	.171*	1

Note: *p<.05, **p<.01
Variables 1: Participation in community economic activities, 2: Expression of opinions, 3: Investment in personal resources, 4: Participation in management, 5: Perceived Benefits and Returns, 6: Sense of Community Attachment, 7: Channels of participation, 8: Access to information and news, 9: Support from community leaders, 10: Positive attitudes towards participation, 11: Self-confidence, 12: Value of helping one another

The correlation analysis results among respondents holding a Bachelor's degree (Table 6) indicated the following findings. Participation in economic activities (Variable 1) had a robust association with personal resource investment (Variable 3), with r = 0.589, p < .01. The expression of opinions (Variable 2) shown a robust link with engagement in community management (Variable 4), with r = 0.554, p < .01. The sense of community attachment (Variable 6) exhibited a robust link with reported benefits (r = 0.576, p < .01). It demonstrated moderate relationships with various forms of participation behaviour, underscoring the importance of emotional connections

to the community in promoting engagement. Channels for participation (Variable 7) had a robust correlation with access to information and news (Variable 8) ($r = 0.626$, $p < .01$). It also shown moderate connections with several participatory behaviours, including involvement in community administration ($r = 0.507$, $p < .01$). This indicates that access to information and accessible avenues for engagement are essential motivators for this group. Support from community leaders (Variable 9) shown a poor correlation with participative behaviours, albeit statistically significant. The correlation coefficients in this group exceed those observed in the Higher Vocational Certificate and Vocational Certificate groups.

Table 6: Mean, Standard Deviation, and Correlation Coefficients of Variables among the Bachelor's Degree Group (N=264).

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	61.14	9.91	1											
2	56.27	6.56	.545**	1										
3	62.43	9.79	.589**	.546**	1									
4	55.16	6.57	.513**	.554**	.523**	1								
5	56.13	5.50	.587**	.592**	.597**	.545**	1							
6	57.21	5.53	.563**	.508**	.536**	.524**	.576**	1						
7	58.37	7.58	.494**	.421**	.354**	.507**	.543**	.570**	1					
8	53.46	9.64	.473**	.348**	.433**	.350**	.464**	.582**	.626**	1				
9	42.35	8.76	.184**	.264**	.167**	.271**	.328**	.234**	.313**	.308**	1			
10	51.48	6.58	.427**	.327**	.324**	.363**	.434**	.465**	.507**	.626**	.247**	1		
11	47.53	5.64	.341**	.392**	.392**	.339**	.315**	.361**	.348**	.289**	.259**	.307**	1	
12	49.56	9.57	.415**	.407**	.213**	.462**	.437**	.315**	.336**	.293**	.413**	.421**	.406**	1

Note: *p<.05, **p<.01

Variables 1: Participation in community economic activities, 2: Expression of opinions, 3: Investment in personal resources, 4: Participation in management, 5: Perceived Benefits and Returns, 6: Sense of Community Attachment, 7: Channels of participation, 8: Access to information and news, 9: Support from community leaders, 10: Positive attitudes towards participation, 11: Self-confidence, 12: Value of helping one another

The analysis of correlation coefficients across three educational levels—Vocational Certificate (Table 4), Higher Vocational Certificate (Table 5), and Bachelor's Degree (Table 6)—revealed that participants at each level demonstrated distinct patterns of statistically significant positive relationships at the $p < .01$ level. As educational attainment rose, individuals exhibited a marked inclination towards more varied types of participative behaviour, accompanied by enhanced interrelations among sub-variables. In group comparisons, individuals possessing a Vocational Certificate exhibited low to moderate correlation coefficients. Conversely, individuals possessing Higher Vocational Certificates and Bachelor's Degrees displayed moderate to high correlation coefficients, especially in the dimensions concerning access to information, participation channels, self-confidence, and favourable attitudes towards participation, which revealed statistically significant correlations across nearly all variable pairs. The findings corroborate Hypothesis 2, indicating that educational attainment is pivotal in augmenting participatory potential for grassroots economic advancement.

The multiple regression analysis (Enter) of educational level in relation to community engagement behaviour in grassroots economy promotion, utilising three sets of predictor variables (Table 7), substantiates Hypothesis 3, since the model demonstrates a predictive variance exceeding 5%. Moreover, the comparison of the three predictor sets revealed an added predictive capacity across all dimensions and subgroups.

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Consequently, it corroborated Hypothesis 4, and the principal findings are as follows:

1) Regarding Set A: Engagement in economic activities, the array of psychological traits and situational variables (1–6) accounted for 31.70% of the variance. The utilisation of solely psychological trait factors (7–8) enhanced the prediction power to 34.60%. The inclusion of all variables (1–8) enabled the model to account for 43.40%, reflecting an enhancement of 8.80% relative to the initial variable set. The primary predictors were support from community leaders (6) ($\beta = 0.22$) and a sense of community attachment (8) ($\beta = 0.21$). These predictors were uniform across all three sets, with discrepancies above 5% in three groups.

2) Regarding Set B: Expression of opinions and the array of psychological traits and situational variables (1–6) accounted for 33.80% of the variance. Employing solely situational variables (7–8) elevated this to 38.50%. The complete collection of variables (1–8) accounted for a high of 47.40%, reflecting an increase of 8.90%. The primary predictors were Sense of Community Attachment (8) ($\beta = 0.44$) and Perceived Benefits and Returns (7) ($\beta = 0.30$). The disparity surpassed 5% across all groups.

3) Regarding Set C: The investment of personal resources demonstrated that the combination of psychological traits and situational variables (1–6) accounted for 32.30% of the variance. Employing solely psychological states (7–8), it produced a result of 37.80%. Incorporating all variables (1–8) elevated this to 41.40% (+3.60%). The primary predictors were Support from community leaders (6) and Channels for engagement (4) ($\beta = 0.31, 0.38$). Discrepancies surpassed 5% in merely two groups.

4) Regarding Set D: Involvement in management and governance revealed that the predictive power utilising all factors rose from 32.60% to 34.70%, reflecting a modest improvement of merely +1.30%. The primary predictors included Support from leaders (6), Access to information (5), and Perceived advantages (7). Discrepancies surpassed 5% in merely two groups.In comparing respondent groups with varying educational levels, it was determined that the third predictive model (incorporating all variables) accounted for over 40% of the variance in the following categories: A: Participation in economic activities (43.40%), B: Expressing opinions (47.40%), and C: Investment of personal resources (41.40%).

This corroborates Hypothesis 5. The research findings illustrate the connections between psychological features, circumstances, and psychological states associated with educational contexts. These findings possess both theoretical and practical importance, especially with the formulation of policies to improve human capital, the execution of community development initiatives that facilitate access to knowledge, and the creation of support systems from community leaders and local networks. The quantitative examination of a sample including 634 individuals from 24 villages across 6 regions in Thailand validates all five hypotheses. The principal conclusions are as follows.

1) Educational level of citizens is significantly different. Those with higher education levels such as a bachelor's degree tend to exhibit greater community participation in the grassroots economy promotion compared to those with lower education levels. Education influences systematic access to information, participation channels, and attitudes toward participation. This is correspondent with the theories of human capital and social capital emphasizing that education enhances individuals' capabilities and fosters trust in social networks.

2) Sense of Community Attachment emerges as a key predictive variable, with the highest beta value ($\beta = 0.61$). This indicates that individuals who feel emotionally attached and identify as part of the community are more likely to engage in various participatory behaviors such as involvement in economic activities, expression of opinions, and participation in community management.

3) Support from community leaders plays a secondary but still significant positive role (β = 0.38), suggesting that the role of local leaders is crucial in fostering collaboration, mobilizing resources, and building members' confidence to actively participate in grassroots economic activities.

4) Access to information and news shows a statistically significant relationship with the expansion of participation channels (r = 0.52), especially among those with at least a vocational certificate. Receiving timely and adequate information helps people recognize the value of participation.

5) Personal resource investment and expression of opinion show moderate to strong correlations with participation in economic activities and community management. This indicates a deeper dimension of participation, not just in terms of quantity, but also in terms of individuals' willingness to contribute time, labor, financial resources, and voice their ideas to develop community initiatives. When comparing groups by educational level, those with vocational and higher vocational certificates showed a moderate positive correlation with participatory behavior variables. Meanwhile, those with bachelor's degrees tended to show higher average values and stronger correlations. From an inferential standpoint, the multiple regression analysis shows that all 8 independent variables could predict over 40% of the variance in community participatory behavior in the overall sample. This is considered a statistically significant and highly accurate prediction rate for research in the behavioral and social sciences.

Table 7: Results of Predicting the Education Level Compared to Community Participatory Behavior in the Grassroots Economy Promotion using all Variables as Predictors.

Set	Group	Prediction Set 1 Psychological Traits and Situations (1 - 6)			Prediction Set 2 Psychological States (7 - 8)			Prediction Set 3 Total Variables (1 - 8)			% of Difference
		% of Prediction	Predictor	Beta Value	% of Prediction	Predictor	Beta value	% of prediction	Predictor	Beta value	
A	Total	31.70	6, 5, 1	.25, .18, .15	34.60	8, 7	.21, .16	43.40	6, 8, 5, 1	.22, .21, .19, .18	8.8*
	Vocational certificate	32.60	3, 6	.26, .13	33.10	8	.25, .22	38.70	8, 3, 6	.25, .24, .22	5.6*
	Higher vocational certificate	31.20	6, 4	.28, .21	35.80	7	.25, .19	39.40	6, 7, 4	.28, .23, .21	3.6
	Bachelor's degree	39.70	6, 5, 3, 1	.35, .21, .19, .14	40.70	7, 8	.23, .17	45.80	6, 5, 7, 3, 1	.35, .31, .30, .26, .25	5.1*
B	Total	33.80	6, 4, 3, 5	.32, .31, .28, .25	38.50	8, 7	.43, .16	47.40	8, 7, 4, 3	.44, .30, .29, .26	8.9*
	Vocational certificate	25.40	4, 3, 6	.38, .37, .24	26.70	8	.47	31.70	8, 3, 4	.45, .36, .22	5.0*
	Higher vocational certificate	27.50	3, 4, 6	.34, .24, .23	28.30	8, 7	.45, .15	33.80	8, 3, 6	.45, .38, .23	5.5*
	Bachelor's degree	30.20	6, 1, 5	.34, .32, .19	39.30	8, 7	.41, .19	45.90	8, 5, 1, 6, 7	.42, .36, .32, .27, .24	6.6*
C	Total	32.30	6, 4, 1	.38, .31, .28	37.80	8	.26	41.40	6, 4, 1	.38, .31, .25	3.6
	Vocational certificate	27.60	6, 3, 1, 4	.31, .24, .22, .19	28.30	8, 7	.43, .18	35.40	8, 7, 3	.44, .27, .26	7.1*
	Higher vocational certificate	26.10	4, 6, 3, 5	.38, .15, .13, .10	28.60	8, 7	.46, .26	30.20	8, 4, 7	.45, .32, .20	1.6
	Bachelor's degree	35.30	6, 3, 5, 1	.25, .16, .15, .14	35.50	8, 7	.48, .16	42.10	8, 3, 6, 5, 1	.45, .24, .22, .18, .14	6.6*
D	Total	32.60	6, 5, 1	.27, .17, .11	33.40	7, 8	.28, .15	34.70	6, 1, 5, 8, 7	.27, .24, .22, .19, .14	1.3
	Vocational certificate	21.40	6, 4, 5, 3	.17, .13, .12, .07	25.30	8, 7	.41, .13	30.40	8, 4, 5	.38, .33, .30	5.1*
	Higher vocational certificate	25.50	6, 3, 5	.37, .35, .33	26.90	8	.61	32.30	8, 5, 6, 3	.45, .43, .41, .39	5.4*
	Bachelor's degree	40.50	5, 6, 3, 4	.38, .37, .24, .21	41.50	8, 7	.36, .18	45.70	8, 7, 5, 6, 3	.44, .33, .32, .29, .28	4.2

Note: *All beta values are significant at 0.05 and have a percentage difference of 5% or more.
**A: Participation in community economic activities, B: Expression of opinions, C: Investment in personal resources, D: Participation in management
*** Predictors 1: Positive attitudes towards participation, 2: Self-confidence, 3: Value of helping one another, 4: Channels of participation, 5: Access to information and news, 6: Support from community leaders, 7: Perceived Benefits and Returns, 8: Sense of Community Attachment

5. Conclusion and Discussion

This research demonstrates the correlation between educational attainment and community engagement in grassroots economic development. The results corroborate all five assumptions. Hypotheses 1 and 2 particularly examined the association among varying levels of schooling. The total sample (N=634) exhibited the highest mean score for engagement in economic activities (M = 55.16, SD = 8.40), succeeded by favourable

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attitudes towards participation (M = 58.41, SD = 7.35) and access to information and news (M = 57.56, SD = 4.61). Analysis of subgroups by educational attainment revealed that persons possessing a bachelor's degree exhibited superior mean scores for involvement and associated supportive characteristics relative to other cohorts, particularly regarding personal resource investment and perceived advantages and returns. Pearson's correlation coefficients revealed that the majority of critical variables were significantly associated at the .01 level. Participation in economic activities shown a significant positive link with the expression of opinions (r = 0.653), personal resource investment (r = 0.590), and involvement in management (r = 0.594). This illustrates the overarching trend that individuals' expression of opinions is contingent upon various elements, notably participation channels and access to information and news. This consequently fosters community engagement. Furthermore, favourable views towards participation emerged as a significant contributing factor. A comparison analysis (Table 8) indicated that mean scores generally increased with higher education levels, especially in factors such as resource investment, participation in economic activities, expression of ideas, and sense of community affiliation. This illustrates the function of education in augmenting human capital and social capital. Nevertheless, the support from community leaders shown minimal association coefficients with other variables. For instance, in the vocational certificate cohort, the correlation (r) between leader support and engagement in economic activities was merely 0.038, indicating a structural deficiency in community-level social networks. This matter necessitates additional qualitative research for comprehensive exploration.

Table 8: Comparison of Mean of Various Variables Classified by Education Level.

Variables	Vocational Certificate	Higher Vocational Certificate	Bachelor's Degree	Academic Issues
1. Participation in community economic activities	54.27	56.12	61.14	The mean is higher according to the education level reflecting the effect of knowledge and skills on participation.
2. Expression of opinions	52.12	53.25	56.27	The bachelor's degree group has more communication skills, assertiveness, and judgment.
3. Investment in personal resources	54.59	57.73	62.43	The bachelor's degree group invests the most resources, indicating readiness in social and economic capital.
4. Participation in management	53.13	54.05	55.16	The mean is higher according to the education level reflecting management skills developed according to education.
5. Perceived Benefits and Returns	52.28	53.04	56.13	The bachelor's degree group has more awareness and analysis of returns.
6. Sense of Community Attachment	52.32	54.15	57.21	Attachment increases according to the education level, reflecting the concept of social capital.
7. Channels of participation	48.27	52.27	58.37	The vocational certificate group has the least opportunity to access channels, consistent with the context of social structure.
8. Access to information and news	45.59	54.53	53.46	The higher vocational certificate group has the highest average value, which may reflect the awareness of information of the working-age professional group.
9. Support from community leaders	39.21	39.24	42.35	It is at a low level in all groups, reflecting weaknesses in leadership and community networks.
10. Positive attitudes towards participation	49.84	48.47	51.48	It is quite similar, but the bachelor's degree group has a slightly better attitude.
11. Self-confidence	56.56	56.52	47.53	The vocational certificate and higher vocational certificate group has a higher average value than the bachelor's degree group, reflecting confidence at the operational level.
12. Value of helping one another	40.52	43.48	49.56	The bachelor's degree group tends to value helping and supporting.

The research findings indicate that structural elements, such as avenues for engagement and access to information and news, significantly influence public participatory behaviours. Simultaneously, individual factors such as a favourable disposition towards involvement, self-assurance, and personal resource allocation serve as catalysts that enhance opportunities for engagement. Furthermore, educational attainment is recognised as a fundamental characteristic that substantially influences disparities among demographic groups. Conversely, support from community leaders exhibited very low average scores and correlation values, highlighting the necessity for the creation of policies and community mechanisms to improve the efficacy and sustainability of public engagement.

The examination of predictive factors for community participatory behaviour in grassroots economic promotion demonstrated that employing a comprehensive array of variables (encompassing psychological traits, situational contexts, and psychological states) yielded the greatest explanatory power across all domains, in contrast to utilising any singular variable set independently. The prediction accuracy varied between 30.40% to 47.40%. The bachelor's degree cohort had a markedly superior ability to elucidate involvement behaviour compared to the vocational certificate and higher vocational certificate cohorts. This underscores the significant significance of schooling in cultivating internal characteristics, such as community attachment and favourable attitudes towards involvement, which subsequently influence actual participation.

This research identified the following key predictors of community participatory behaviors. 1) Sense of Community Attachment: This variable emerged as the most significant predictor, showing the highest beta values and consistently influencing all dimensions of participation behavior, especially expression of opinions (B) and investment of personal resources (C). Overall beta values ranged from 0.21 to 0.45, depending on the dimension and participant group. Among bachelor's degree holders, beta values typically ranged between 0.42 to 0.45. This indicates that when individuals feel emotionally connected to their community, it directly impacts their motivation and decision-making to engage in activities, including voluntarily contributing personal resources for the collective good. This finding agrees with the concept of social capital, which emphasizes a sense of ownership, trust, and strong social networks. It also reinforces the idea that social capital, informational capital, and cultural capital within communities must be developed concurrently to foster strong and sustainable grassroots participation.

2) Access to Information and news: This variable consistently appeared as a significant predictor across several behavioral dimensions, particularly in economic activity participation (A) and participation in management (D). For the bachelor's degree group and the combined group, beta values ranged from 0.18 to 0.36. For instance, in behavior A, the bachelor's group showed a beta of 0.31, and in dimensions B and D, the values were 0.32, respectively. These findings highlight the importance of accessible, up-to-date, comprehensive, and reliable sources of information, which enable citizens to make informed decisions about participating. This result supports the framework of informational capital, emphasizing the crucial role of effective communication and information dissemination in enhancing participation.

3) Participation Channels (Variable 4): This variable played a clear role in the dimensions of opinion expression (B) and personal resource investment (C), particularly among the vocational certificate and higher vocational certificate groups. The availability and accessibility of participation channels significantly influenced behaviors such as speaking out and voluntarily contributing resources. Beta values across several groups

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ranged between 0.22 and 0.32. For example, in the combined group for dimension B, the beta was 0.29, and for dimension C, it was 0.31.

4) Support from Community Leaders (Variable 6): Although not the variable with the highest beta values, this factor consistently appeared in the dimensions of participation in economic activities (A) and management (D), especially among the bachelor's degree group, which showed a high beta of up to 0.35. This finding indicates that capable and trusted community leaders or core actors can significantly motivate members to participate.

5) Other supporting factors such as positive attitude towards participation (Variable 1) and altruistic values or the value of mutual support (Variable 3). These emerged as supportive predictors, especially among groups with moderate levels of social capital like the vocational certificate and higher vocational certificate groups. These variables showed moderate beta values ranging from 0.24 to 0.36, particularly in the dimensions of personal resource investment and expression of opinion. This suggests that fostering positive attitudes and prosocial values can help enhance participatory behavior.

The study validates that educational attainment substantially and positively affects community participating behaviour, corroborating Schultz's (1961) Human Capital hypothesis. This theory posits that education augments an individual's potential regarding knowledge, critical thinking skills, and rational decision-making capabilities. The findings concurrently accord with Putnam's (2000) Social Capital Theory, which elucidates how higher education cultivates social networks that promote group formation, information exchange, and collective decision-making for mutual advantage. In comparison to the study of Pillai and Ahamat (2018) in Southeast Asia, analogous findings were seen; communities with elevated average educational levels developed more robust community economic networks. This aligns with Psacharopoulos and Patrinos (2018), who affirmed that the benefits on educational investment in underdeveloped nations remain substantial, particularly in relation to local economic development. Additionally, a multiple regression analysis indicated that community affiliation exhibited the greatest weight (β=0.61). This aligns with Hidalgo and Hernandez's (2001) Place Attachment concept and Pretty's (1995) research, which posits that a sense of ownership and trust within a community incentivises individuals to safeguard and sustainably advance their local economy. Moreover, the perception of returns and benefits exhibited significant importance, aligning with the principles of Cost-Benefit Analysis theory (Kaufman & Dilla Alfonso, 1997). This theory posits that involvement persists only if individuals evaluate that their commitment of time, effort, or capital produces valuable returns. Despite having a lower beta value than other components, support from community leaders remained a significant predictor. This aligns with the Community Leadership concept (Coleman, 1988), which underscores that leaders function as coordinators of information and resources, fostering trust to effectively propel collaborative endeavours within the community. This study corroborates Chamber's (1993) finding that inadequate leadership markedly diminishes sustained community engagement. The data reveals a moderate to strong association between access to knowledge and avenues for engagement, especially among individuals with elevated educational attainment. This mechanism aligns with Rogers' (2011) Development Communication idea, which posits that swift and dependable information distribution mitigates uncertainty and enhances community preparedness for diverse activities. The research findings align with Endler & Magnusson's (1977) Interactionism Theory, which posits that individual behaviour emerges from the interplay of personal traits and situational influences.

Ajzen's (1991) Theory of Planned Behaviour elucidates that positive attitudes, self-efficacy, and perceived behavioural control are cultivated and influenced by educational achievement and supportive elements from community frameworks.

5.1. Limitations

1) This research only used samples from communities with specific grassroots economic characteristics in certain study areas. This might mean the findings cannot fully explain or generalize to communities in other regions with different social, economic, and cultural contexts. Therefore, applying these results elsewhere should consider the suitability for other local contexts.

2) The data collection instruments rely on Likert scales and self-reports, which can introduce response bias such as social desirability. Moreover, the interpretation of abstract variables such as community level or values of mutual assistance might vary individually, affecting the accuracy of some data.

3) Although the research covered psychological traits and situations predictors, there might be other confounding factors that were not measured. These could include the role of government policies, external economic capital, or social structural factors like regional inequality, which could also influence the level of public participation in different areas.

5.2. Future Research Directions

1) Future research should broaden the scope and diversity of the sample to allow for wider generalization. Studies should be conducted in communities with diverse economic and social characteristics, encompassing both geographical dimensions and urban and rural community contexts, to compare participation patterns under different conditions.

2) It would be beneficial to explore other potential confounding factors that might influence participation. These could include policy structures, economic inequality, cultural factors, differences across occupational groups, and the influence of external social networks. This would provide a more comprehensive understanding of the participation ecosystem.

3) Subsequent research should further investigate differences in participation based on other demographic variables such as age, gender, income, occupation, or work experience within the community. This would help identify characteristics of groups with high potential or those requiring specific policy support.

4) Ongoing training programs should be implemented to develop the potential of community members. These programs should aim to enhance critical thinking, judgment, and confidence to participate in grassroots economic activities.

5) Internal communication infrastructure should be improved in communities to ensure equitable access to information for all groups, thereby reducing information disparity.

6) Government and local agencies should prioritize developing leadership at the village or community level. This would enable leaders to effectively serve as intermediaries, connecting resources and opportunities to the populace.

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