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CULTURE AS FOUNDATION: ETHNIC IDENTITY AND ACADEMIC RESILIENCE AMONG INDIGENOUS PEOPLES EDUCATION SECONDARY SCHOOL STUDENTS IN MAGPET, COTABATO

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ABSTRACT

This quantitative study examined the extent to which culture serves as a foundation and ethnic identity is explored among Indigenous Peoples Education (IPED) secondary school students in Magpet East District, Cotabato, and the relationship of these variables with the development of academic resilience. Employing a descriptive-correlational research design, data were collected from 280 respondents drawn from ten IPED-implementing secondary schools through simple random sampling. Three adapted instruments were used: a Culture as Foundation Questionnaire, an adapted Multigroup Ethnic Identity Measure–Revised (MEIM-R), and an adapted Academic Resilience Scale (ARS-30). Statistical analyses included weighted mean for descriptive purposes, Spearman Rho for relational hypotheses, and multiple regression for predictive modeling. Findings revealed that culture as a foundation was rated Highly Cultured across all six dimensions (overall grand mean = 4.56), ethnic identity exploration was rated Highly Explored across all six dimensions (overall weighted mean = 4.60), and academic resilience was rated Highly Developed across all three dimensions (overall weighted mean = 4.66). Spearman Rho correlations confirmed highly significant relationships between all dimensions of culture as foundation and academic resilience ($r = .600^{**}$ to $.715^{**}$, all $p < .001$), and between all dimensions of ethnic identity exploration and academic resilience ($r = .626^{**}$ to $.766^{**}$, all $p < .001$). Multiple regression analysis revealed that culture as a foundation explained 54.2% to 62.5% of the variance in

academic resilience outcomes, while ethnic identity exploration explained 72.2% to 76.2% of the variance—with mental practice, language, and culture emerging as the most powerful predictors. These findings affirm that for indigenous learners, cultural identity is not peripheral to academic success but constitutes its very foundation.

KEYWORDS: *ethnic identity, academic resilience, indigenous peoples education, culture as foundation, IPED, Manobo, Magpet, Cotabato, MEIM-R, descriptive-correlational*

INTRODUCTION

Educational resilience—the capacity to achieve academic success despite adverse socioeconomic, linguistic, or cultural circumstances—has emerged as a central focus of global efforts to promote equity in education (Agasisti et al., 2018). For indigenous populations, the pathways to such resilience are deeply interwoven with sociocultural contexts that mainstream educational research has historically underexamined. In the Philippines, the Indigenous Peoples Education (IPED) framework, formalized through Department of Education Order No. 62 (2011), represents a significant policy initiative to deliver culturally grounded, context-responsive education to learners from indigenous communities. Yet despite this institutional commitment, significant disparities in academic access, engagement, and outcomes persist for Indigenous Filipino youth (Rogayan, 2019).

A growing international literature posits that a well-developed and affirming sense of ethnic identity functions as a critical protective factor for minority youth, supporting psychological well-being and enabling adaptive responses to discrimination and structural adversity (Phinney, 1992; Syed & Juang, 2014). Ethnic identity achievement—the developmental outcome of active exploration and commitment to one's cultural group—has been consistently linked to higher self-esteem, stronger sense of belonging, and greater academic resilience (Umaña-Taylor et al., 2014; Romero et al., 2014). Bronfenbrenner's ecological systems theory (1979) further frames resilience not as a personal trait but as a dynamic outcome of transactions between the developing person and their nested environmental systems, including family, community, and school.

In Magpet, North Cotabato, where Manobo and other ethnolinguistic communities reside, IPED schools integrate indigenous knowledge systems and practices (IKSPs) into the curriculum and school culture (Añolga, 2023). This institutional affirmation of cultural identity creates a unique ecosystem in which to examine how students' ethnic identity—nurtured by family, community heritage, and culturally responsive pedagogy—translates into

academic resilience at the secondary level. The present study sought to fill this empirical gap through a rigorous quantitative investigation that systematically measured the levels of culture as a foundation, ethnic identity exploration, and academic resilience, and statistically tested the relationships and predictive influences among these constructs.

RESEARCH QUESTIONS

This study specifically addressed the following quantitative research questions: (1) What is the extent of culture as a foundation in terms of expression, lifestyle, spiritual, psychological, social, and mental practice? (2) To what extent is ethnic identity explored in relation to race, national origin, tribal heritage, religion, language, and culture? (3) What is the level of academic resilience development in terms of skill-building, fostering a growth mindset, and creating a supportive environment? (4) Is there a significant relationship between culture as a foundational factor and the development of academic resilience? (5) Does culture as a foundation significantly influence the development of academic resilience? (6) Is there a significant relationship between ethnic identity exploration and the development of academic resilience? (7) Does ethnic identity exploration significantly influence the development of academic resilience?

METHODOLOGY

Research Design

This study employed a descriptive-correlational research design, which is appropriate for systematically describing the levels of key variables and testing the statistical relationships and predictive influences among them without manipulating variables (Cochran, 2015). This quantitative phase formed the first strand of a broader sequential mixed-methods study, providing the empirical baseline upon which the subsequent qualitative phase was built.

Participants and Sampling

The study population comprised all secondary students enrolled in the ten IPED-implementing schools of Magpet East District, Schools Division of Cotabato. A total of 280 respondents were drawn from these schools through simple random sampling, proportionally distributed as follows: Imamaling HS (n=26), Manobo NHS (n=38), Manobisa HS (n=26), BA Calamba HS (n=36), Bongolanon HS (n=30), Bangkal HS (n=24), Sallab HS (n=23), Don Panaca HS (n=25), Manumba HS (n=28), and Kisandal HS (n=24). Inclusion criteria required that respondents be identified members of local indigenous communities officially enrolled in the IPED program.

Research Instruments

Three validated instruments were employed. The Culture as Foundation Questionnaire measured the extent of cultural grounding across six dimensions: expression, lifestyle, spiritual, psychological, social, and mental practice. The adapted Multigroup Ethnic Identity Measure–Revised (MEIM-R; Phinney, 1992; Ponterotto et al., 2003) assessed ethnic identity exploration across six dimensions: race, national origin, tribal heritage, religion, language, and culture. The adapted Academic Resilience Scale (ARS-30; Cassidy, 2016) measured academic resilience development across three dimensions: building skills, promoting a growth mindset, and creating a supportive environment. All instruments used a five-point Likert scale. Content validity was established by three expert validators specializing in Guidance and Counseling, and reliability was confirmed through pilot testing with 30 indigenous youth participants (Cronbach's $\alpha \geq 0.70$).

Statistical Analysis

Weighted mean was used to describe the levels of culture as a foundation, ethnic identity exploration, and academic resilience. Spearman's Rank-Order Correlation (Spearman Rho) was applied to test the significance of relationships between the predictor variables and academic resilience dimensions, appropriate for ordinal-scale data. Multiple Regression Analysis was used to determine the predictive influence of cultural and ethnic identity dimensions on academic resilience outcomes.

RESULTS AND DISCUSSION

Extent of Culture as a Foundation

Table 1 presents the summary of respondents' scores on all six dimensions of culture as a foundation.

Table 1. Extent of Culture as a Foundation Among IPED Secondary School Students.

Dimension	Grand Mean	Description
Expression	4.60	Highly Cultured
Lifestyle	4.57	Highly Cultured
Spiritual	4.59	Highly Cultured
Psychological	4.54	Highly Cultured
Social	4.57	Highly Cultured
Mental Practices	4.51	Highly Cultured
Overall Grand Mean	4.56	Highly Cultured

The overall grand mean of 4.56 (Highly Cultured) indicates that IPED students in Magpet demonstrate deeply internalized cultural foundations across all dimensions. Expression obtained the highest single dimension mean of 4.60, reflecting that language, art, music, and tradition function as powerful tools through which students communicate meaning and reinforce communal identity. Mental practices scored 4.51, the lowest but still within the Highly Cultured range, indicating that while cultural transmission of cognitive habits is strong, there may be room for further deliberate cultivation of culturally grounded problem-solving and emotional regulation practices within the formal curriculum. These findings resonate with Wexler (2022), who emphasized that cultural practices provide indigenous adolescents with meaningful frameworks for emotional expression, coping, and resilience-building.

Extent of Ethnic Identity Exploration

Table 2 presents the summary of respondents' scores on all six dimensions of ethnic identity exploration.

Table 2. Extent of Ethnic Identity Exploration Among IPED Secondary School Students.

Dimension	Weighted Mean	Description
Race	4.55	Highly Explored
National Origin	4.57	Highly Explored
Tribal Heritage	4.63	Highly Explored
Religion	4.61	Highly Explored
Language	4.61	Highly Explored
Culture	4.63	Highly Explored
Overall Weighted Mean	4.60	Highly Explored

The overall weighted mean of 4.60 (Highly Explored) indicates that IPED students in Magpet have engaged extensively with the multiple dimensions of their ethnic identity. Tribal heritage and culture both achieved the highest means of 4.63, reflecting the central role of ancestral knowledge, customs, and traditional practices in students' identity formation. Race scored the lowest mean at 4.55, still within the Highly Explored range, suggesting that while students engage deeply with cultural and heritage-based dimensions, racial self-awareness—particularly critical consciousness about privilege, discrimination, and marginalization—may benefit from further explicit pedagogical attention. These results align with Phinney's (1992) ethnic identity development framework, in which active exploration and affirmation of one's

cultural group constitutes the pathway to a secure, achieved ethnic identity that functions as a protective psychological resource.

Level of Academic Resilience Development

Table 3 presents the summary of respondents' scores on all three dimensions of academic resilience.

Table 3. Level of Academic Resilience Development Among IPED Secondary School Students.

Dimension	Weighted Mean	Description
Building Skills	4.67	Highly Developed
Promoting a Growth Mindset	4.63	Highly Developed
Supportive Environment	4.68	Highly Developed
Overall Weighted Mean	4.66	Highly Developed

The overall weighted mean of 4.66 (Highly Developed) indicates that IPED students in Magpet demonstrate well-developed academic resilience across all three dimensions. Supportive environment scored highest at 4.68, suggesting that the relational ecology of IPED schools—characterized by teacher mentorship, peer collaboration, and family engagement—is the most actively experienced dimension of academic resilience. Building skills scored 4.67, reflecting strong self-regulation, goal-setting, and collaborative competencies among respondents. Growth mindset scored 4.63, indicating that students generally perceive academic challenges as opportunities for learning. These findings are consistent with García and Lim (2022), who found that culturally affirming school environments characterized by teacher support and inclusive practices significantly enhance students' perseverance, emotional regulation, and help-seeking behaviors.

Relationship Between Culture as Foundation and Academic Resilience

Table 4 presents the Spearman Rho correlation matrix between dimensions of culture as a foundation and dimensions of academic resilience.

Table 4. Spearman Rho Correlation: Culture as Foundation and Academic Resilience (all $p < .001$).

Culture as Foundation	Building Skills	Growth Mindset	Supportive Env.
Expression	0.670**	0.616**	0.618**
Lifestyle	0.648**	0.614**	0.600**
Spiritual	0.618**	0.600**	0.650**
Psychological	0.640**	0.690**	0.612**
Social	0.666**	0.666**	0.642**
Mental Practice	0.715**	0.710**	0.677**

All eighteen correlation coefficients in the matrix are highly significant ($p < .001$), leading to the rejection of the first null hypothesis. The strongest relationship is between mental practice and building skills ($r = .715$), confirming that culturally transmitted cognitive habits—including problem-solving strategies, emotional regulation, and decision-making frameworks—are the most potent cultural resource for developing academic skills. Spiritual cultural practices demonstrated the strongest relationship with supportive environment ($r = .650$), reflecting that the morally and relationally grounded framework provided by spiritually embedded culture creates the conditions of belonging and mutual accountability that constitute genuinely supportive learning environments. These findings are substantiated by Bronfenbrenner's (1979) ecological systems theory, which establishes that development—including academic resilience—is shaped by the cultural values and relational norms embedded across multiple environmental systems.

Relationship Between Ethnic Identity Exploration and Academic Resilience

Table 5 presents the Spearman Rho correlation matrix between dimensions of ethnic identity exploration and dimensions of academic resilience.

Table 5. Spearman Rho Correlation: Ethnic Identity Exploration and Academic Resilience (all $p < .001$).

Ethnic Identity	Building Skills	Growth Mindset	Supportive Env.
Race	0.704**	0.728**	0.738**
National Origin	0.696**	0.694**	0.626**
Tribal Heritage	0.714**	0.704**	0.673**
Religion	0.677**	0.701**	0.703**
Language	0.728**	0.734**	0.766**
Culture	0.681**	0.683**	0.735**

Ethnic identity exploration dimensions demonstrate even stronger correlations with academic resilience than culture as a foundation, with all eighteen coefficients highly significant ($p < .001$). The most remarkable finding is the correlation between language-based ethnic identity and supportive environment ($r = .766$), the single highest correlation in the entire study. This finding directly validates May's (2014) argument that linguistic affirmation within educational settings is the most powerful indicator of cultural validation and school belonging for indigenous learners. When students' native language is affirmed academically, the school environment is transformed into a culturally supportive space that directly activates academic resilience. The consistently strong correlations between tribal heritage and all three resilience dimensions ($r = .673$ to $.714$) affirm Cajete's (1994) assertion that indigenous tribal knowledge systems—emphasizing relational knowing, community interdependence, and adaptive learning—are fundamentally oriented toward resilience.

Influence of Culture and Ethnic Identity on Academic Resilience

Table 6 summarizes the multiple regression results for the predictive influence of culture as a foundation and ethnic identity exploration on academic resilience dimensions.

Table 6. Summary of Multiple Regression Analysis: Cultural Variables as Predictors of Academic Resilience.

Outcome Variable	R ²	F-Value	p-value	Key Predictors
Culture → Building Skills	0.619	74.138	0.000**	Expression ($\beta=.209^{**}$), Mental Practice ($\beta=.365^{**}$)
Culture → Growth Mindset	0.542	54.067	0.000**	Social ($\beta=.167^*$), Mental Practice ($\beta=.286^{**}$)
Culture → Supportive Env.	0.625	76.093	0.000**	Spiritual ($\beta=.396^{**}$), Social ($\beta=.217^{**}$), Mental Practice ($\beta=.205^{**}$)
Ethnic Identity → Building Skills	0.747	134.787	0.000**	Culture ($\beta=.267^{**}$), Language ($\beta=.186^{**}$), Tribal ($\beta=.180^{**}$)
Ethnic Identity → Growth Mindset	0.762	93.438	0.000**	Language ($\beta=.259^{**}$), Tribal ($\beta=.226^{**}$), Religion ($\beta=.149^*$)
Ethnic Identity → Supportive Env.	0.722	118.331	0.000**	Language ($\beta=.452^{**}$), Culture ($\beta=.225^{**}$), Race ($\beta=.183^{**}$)

The regression models confirm highly significant predictive influences across all academic resilience outcomes ($p < .001$ for all F-values). Culture as a foundation explained between 54.2% (growth mindset) and 62.5% (supportive environment) of variance in resilience dimensions. Mental practice was the dominant predictor of building skills ($\beta = .365$, $p < .001$) and growth mindset ($\beta = .286$, $p < .001$), while spiritual cultural dimensions were the primary predictor of supportive environment ($\beta = .396$, $p < .001$), affirming that indigenous students' capacity to create and sustain supportive learning communities is most strongly rooted in the moral, relational, and transcendent frameworks provided by their spiritual cultural heritage.

Ethnic identity exploration explained substantially greater proportions of variance: 74.7% for building skills, 76.2% for growth mindset, and 72.2% for supportive environment. Language emerged as the dominant predictor of supportive environment ($\beta = .452$, $p < .001$), and culture was the dominant predictor of building skills ($\beta = .267$, $p < .001$). The substantially higher explanatory power of ethnic identity exploration relative to culture as a foundation suggests that the active, agentic process of identity exploration—students' deliberate engagement with their racial, linguistic, tribal, and cultural identities—is a more powerful predictor of academic resilience than passive cultural immersion alone. This finding is consistent with Phinney and Ong's (2007) demonstration that high-achieved ethnic identity is

among the strongest psychosocial predictors of academic motivation and persistent skill development.

CONCLUSIONS

This quantitative investigation provides compelling empirical evidence that culture and ethnic identity are not peripheral to academic resilience among IPED secondary school students in Magpet but constitute its very foundation. All research hypotheses were rejected at the 0.01 level of significance: both culture as a foundation and ethnic identity exploration demonstrate highly significant relationships with, and substantial predictive influence on, all three dimensions of academic resilience. The findings establish that mental practice, language, and culture are the most powerful predictors within their respective variable sets, underscoring the particular importance of culturally transmitted cognitive frameworks, indigenous linguistic affirmation, and active cultural engagement as mechanisms of resilience.

The consistently high descriptive scores across culture, ethnic identity, and academic resilience dimensions suggest that the IPED framework in Magpet has created an institutional ecosystem that effectively affirms students' cultural identities and leverages these as academic assets. However, the variance unexplained by the models (23.8% to 45.8%) indicates that additional factors—including family dynamics, teacher quality, peer relationships, and individual personality characteristics—also contribute significantly to academic resilience outcomes, pointing toward the necessity of the qualitative investigation conducted in Phase 2.

RECOMMENDATIONS

Based on the quantitative findings, the following evidence-based recommendations are advanced. First, IPED curriculum designers should prioritize the integration of culturally transmitted mental practices—particularly indigenous problem-solving strategies, emotional regulation frameworks, and communal decision-making traditions—into formal academic instruction across all subject areas, as these demonstrated the strongest predictive effects on skill-building and growth mindset. Second, mother tongue-based multilingual instruction should be maintained and expanded throughout secondary schooling, given the dominant predictive effect of language-based ethnic identity on the supportive academic environment. Third, culturally contextualized community engagement activities—including elder interaction, tribal heritage documentation, and cultural celebration—should be formally structured into school calendars as these dimensions of ethnic identity exploration showed the

strongest relationships with building skills and growth mindset. Fourth, school administrators should use the validated instruments of this study to periodically assess and monitor the levels of cultural grounding and ethnic identity exploration among their student populations, enabling data-driven adjustments to IPED curriculum implementation. Fifth, future researchers should extend this investigation through longitudinal designs and comparative studies across different indigenous groups and districts to examine how the relationships documented here evolve over time and vary across sociocultural contexts.

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