

The influence of entrepreneurial skills and entrepreneurial alertness on entrepreneurial tendency among senior high school students in Kapalong, Davao del Norte, Philippines

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ABSTRACT

This study examined the influence of entrepreneurial skills and entrepreneurial alertness on entrepreneurial tendency among senior high school students in Kapalong, Davao del Norte, Philippines. Using a descriptive-correlational design, data were collected from 252 students across four private schools through convenience sampling. Results indicated moderate levels of entrepreneurial skills, alertness, and entrepreneurial tendency among respondents. Statistical analyses revealed significant positive relationships between entrepreneurial skills and entrepreneurial tendency ($r=0.426$, $p<.05$) and between entrepreneurial alertness and entrepreneurial tendency ($r=0.596$, $p<.05$). Multiple regression analysis further showed that both entrepreneurial skills ($\beta=0.154$, $p<.05$) and entrepreneurial alertness ($\beta=0.515$, $p<.05$) significantly predicted entrepreneurial tendency, with entrepreneurial alertness exerting a stronger influence. The findings underscore the importance of integrating skill-based and awareness-oriented entrepreneurial education into senior high school curricula to foster youth entrepreneurship. This study contributes to the growing literature on entrepreneurial development among adolescents in rural contexts and offers practical implications for educators, policymakers, and community stakeholders aiming to promote economic innovation and self-reliance among youth.

1. Introduction

Entrepreneurship serves as a vital catalyst for economic development, job creation, and innovation, particularly within emerging economies where youth unemployment and underemployment remain persistent challenges (Obschonka & Stuetzer, 2020). Central to this process is the entrepreneurial tendency—an individual's inclination toward risk-taking, innovativeness, and proactive venture creation. This propensity not only fuels business formation but also enhances community resilience and

socioeconomic mobility (Zhang, Su & Wang, 2025). Nevertheless, in many developing regions, aspiring young entrepreneurs encounter formidable barriers, including limited access to startup capital, insufficient entrepreneurial education, and sociocultural norms that discourage enterprise in favor of traditional employment (Pillai & Ahamat, 2018). Such constraints are evident in the Philippines, where despite national initiatives promoting entrepreneurship, students in areas like Iligan City frequently opt for corporate careers due to fears of financial instability and failure (Resurreccion, 2010).

The cultivation of entrepreneurial potential is increasingly linked to two core constructs: entrepreneurial skills and entrepreneurial alertness. Entrepreneurial skills encompass competencies such as self-efficacy, strategic focus, and calculated risk-taking, which enable individuals to navigate business challenges effectively (Gielnik et al., 2020). Complementarily, entrepreneurial alertness refers to the cognitive capacity to identify, evaluate, and act upon market opportunities—a trait shown to significantly influence entrepreneurial intention and venture success (Tang et al., 2023). Recent empirical work underscores the interconnectedness of these variables; for example, alertness often mediates the relationship between prior entrepreneurial exposure and future intention (Edigbo et al., 2021), while targeted educational interventions can enhance both creativity and opportunity recognition (Hassan et al., 2020). However, existing research has predominantly concentrated on university students or urban entrepreneurial ecosystems, leaving a critical gap regarding how these factors operate among senior high school students in rural and semi-rural settings, where economic alternatives are scarce and entrepreneurial activation could yield substantial local impact.

This gap is particularly salient in communities such as Maniki, Kapalong, Davao del Norte—a region characterized by limited formal employment opportunities yet abundant youth potential. The absence of focused studies in this context represents a significant oversight, given that adolescence is a formative period for career identity and that early exposure to entrepreneurship education can have lasting effects on future economic behavior (Affandi et al., 2021). Furthermore, while prior investigations have examined skills and alertness in isolation, few have explored their combined influence on entrepreneurial tendency within a specifically rural Philippine senior high school population. Addressing this omission is essential for developing context-sensitive educational frameworks that bridge the gap between academic preparation and real-world entrepreneurial action.

Consequently, this study aims to examine the influence of entrepreneurial skills and entrepreneurial alertness on the entrepreneurial tendency of senior high school students in Maniki, Kapalong, Davao del Norte. Employing a quantitative descriptive-correlational design, the research seeks to elucidate the relationships between these variables and determine which factors most significantly predict entrepreneurial propensity. The findings are expected to provide evidence-based insights for curriculum designers, policymakers, and community stakeholders, thereby contributing to locally relevant youth entrepreneurship programs and advancing scholarly understanding of entrepreneurial development in rural Southeast Asian contexts.

2. Theoretical basis

This study is theoretically anchored in the complementary frameworks of McClelland's (1961) Trait Theory and Davidsson and Wiklund's (2001)

Entrepreneurial Event Theory (EET). Trait Theory posits that entrepreneurial behavior stems from innate psychological characteristics, such as achievement motivation, risk propensity, and an internal locus of control. In this research, these traits are operationalized as core dimensions of entrepreneurial skills—namely self-competency, control focus, and tendency to take risks. This dispositional perspective helps explain why some senior high school students in Kapalong, Davao del Norte may demonstrate a stronger inherent inclination toward entrepreneurship, even within a context of limited economic exposure.

Conversely, Entrepreneurial Event Theory shifts focus from static traits to dynamic cognitive processes, emphasizing how individuals recognize and act upon opportunities. EET aligns closely with the construct of entrepreneurial alertness, which involves scanning, association, evaluation, and proactive behavior. This theory illuminates the perceptual and cognitive mechanisms through which students identify viable ventures in their local environment. By integrating EET, the study examines not only who is predisposed to entrepreneurship, but also how environmental awareness and opportunity recognition activate or enhance that predisposition.

Together, these theories provide a holistic lens through which to investigate the combined influence of entrepreneurial skills and alertness on entrepreneurial tendency among rural youth. Trait Theory explains the foundational personal attributes that may drive entrepreneurial interest, while EET accounts for the situational and cognitive processes that translate potential into intention. This dual-theory approach supports the development of targeted educational interventions—aimed at cultivating both inherent entrepreneurial traits and context-aware opportunity recognition—to effectively foster youth entrepreneurship and local economic resilience in communities like Kapalong, Davao del Norte.

3. Methodology

3.1 Participants

The target population for this study consisted of senior high school students enrolled in private secondary schools within Barangay Maniki in Kapalong, Davao del Norte, Philippines, during the academic year 2023–2024. The total population of eligible students across four private institutions was 679, as shown in Table 1.

Table 1. *Distribution of Respondents by School*

School	Population	Percentage	Sample (n)
Private School A	84	12.37%	31
Private School B	153	22.53%	57
Private School C	242	35.64%	90
Private School D	200	29.46%	74
Total	679	100%	252

A convenience sampling strategy was employed to select 252 respondents, representing approximately 37% of the total population. Convenience sampling was deemed appropriate given the accessibility of participants, time and resource constraints, and the descriptive-correlational nature of the study. Inclusion criteria were: (1) current enrollment as a Grade 11 or 12 student in one of the identified private schools, (2)

availability and willingness to participate during the data collection period, and (3) provision of signed parental consent for minors. Exclusion criteria included: (1) students from public schools or outside the specified locale, (2) those unwilling or unable to provide consent, and (3) students who had not completed at least one semester of senior high school.

3.2 Materials or Instruments

This study employed validated survey instruments to measure the three core constructs under investigation. Entrepreneurial skills were assessed using the 15-item scale adapted from Geri (2013), measuring three dimensions: self-competency, control focus, and tendency to take risk. Entrepreneurial alertness was measured using the 30-item scale adapted from Chavoushi and Valliere (2021), comprising seven indicators: scanning and search, association and connection, evaluation and judgment, entrepreneurial self-efficacy, entrepreneurial intention, proactive personality, and entrepreneurial behavior. Entrepreneurial tendency was evaluated using the 15-item scale also adapted from Geri (2013), which covers three motivational dimensions: desire to gain status, success motives, and desire to provide economic benefits. All items were rated on a five-point Likert scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Responses were interpreted using a standardized matrix where, for example, a mean of 4.20–5.00 corresponded to *Very High/Always Manifested*, while 1.00–1.79 indicated *Very Low/Never Manifested*. This consistent scaling allowed for uniform comparison across constructs.

Prior to administration, the instrument underwent content validation by a panel of experts in entrepreneurship and research methodology. A pilot test was conducted with 30 senior high school students to evaluate internal consistency, which yielded acceptable Cronbach's alpha values for all scales. The final instrument demonstrated both validity and reliability for use within the study's context.

3.3 Data Collection

The study utilized a quantitative descriptive-correlational design to examine the relationships between entrepreneurial skills, entrepreneurial alertness, and entrepreneurial tendency. Data collection followed a structured, multi-phase procedure after obtaining institutional ethics approval and securing permission from the participating private schools in Barangay Maniki in Kapalong, Davao del Norte. Upon approval, the researcher coordinated with school administrators to schedule survey sessions during non-instructional periods to avoid disrupting academic activities. Data were collected in person using printed questionnaires, which were distributed to consenting senior high school students across four private schools. A researcher was present during each session to provide instructions, address clarifications, and ensure the proper completion of the instrument. The survey remained open for a period of three weeks, during which 252 valid responses were collected, meeting the target sample size. Completed questionnaires were retrieved on the same day to ensure data security and respondent anonymity. Responses were then manually encoded, cleaned, and prepared for statistical analysis using IBM SPSS Statistics version 26.

Data analysis proceeded in two stages: first, descriptive statistics (mean, standard deviation) were computed to assess the levels of each variable; second, inferential analyses, including Pearson's *r* correlation and multiple regression analysis, were performed to test the relationships and predictive influences outlined in the research objectives. Results were interpreted and reported in alignment with the study's theoretical framework and hypotheses.

4. Result and Discussion

4.1. Results

4.1.1. Descriptive Statistics: Entrepreneurial Skills

The overall level of entrepreneurial skill among senior high school students was moderate ($M = 3.20$). Across the dimensions, control focus received the highest mean score ($M = 3.34$), while self-competency scored the lowest ($M = 3.05$). The tendency to take risk also reflected a moderate level ($M = 3.19$). Within self-competency, the item "Wanting to establish my own business more than anything else" received the highest mean ($M = 3.49$), whereas "Loving meeting people and working with them" scored lowest ($M = 2.81$). For control focus, "Trying something that I feel safe for myself and possible business" was highest ($M = 3.58$), while the lowest-rated items ($M = 3.25$) pertained to external reliance and hesitation. In the tendency to take risk, "Trying to invest money towards business" was rated highest ($M = 3.37$), whereas "Having taken some risks in the last six months" was lowest ($M = 2.88$).

Table 2. Descriptive statistics for the level of senior high school students' entrepreneurial skills ($N = 252$)

Variable	<i>M</i>	Descriptive level
Self-competence	3.05	moderate
Control focus	3.34	moderate
Tendency to take risk	3.19	moderate
Overall	3.20	moderate

4.1.2 Descriptive Statistics: Entrepreneurial Alertness

The overall level of entrepreneurial alertness was moderate ($M = 3.32$). Among the dimensions, entrepreneurial self-efficacy scored highest ($M = 3.37$), while evaluation and judgment scored lowest ($M = 3.26$). Within these dimensions, the highest-rated items were "Being convinced that I can successfully create new products" ($M = 3.48$) and "Having think of products I may offer" ($M = 3.53$), while the lowest were "Spotting connection between unrelated information" ($M = 3.07$) and "Being able to identify better opportunities" ($M = 3.02$).

Table 3. Descriptive statistics for entrepreneurial alertness of senior high school students ($N=252$)

Variable	<i>M</i>	Descriptive level
Scanning and search	3.34	moderate
Association and connection	3.34	moderate
Evaluation and judgment	3.26	moderate
Entrepreneurial self-efficacy	3.37	moderate
Entrepreneurial intention	3.28	moderate
Proactive personality	3.36	moderate
Entrepreneurial behavior	3.32	moderate
Overall	3.32	moderate

4.1.3 Descriptive Statistics: Entrepreneurial Tendency

The overall level of entrepreneurial tendency among senior high school students was moderate ($M = 3.20$). Among the three motivational dimensions, success motives received the highest mean score ($M = 3.27$), followed by desire to gain status ($M = 3.19$), while the desire to provide economic benefits scored lowest ($M = 3.14$). Within these dimensions, the items "Being respected in society" ($M = 3.44$) and "Learning continuously" ($M = 3.41$) were rated highest, whereas "Being increasing the status of my family" ($M = 2.90$) and "Enhancing the development of my curiosity" ($M = 3.01$) were among the lowest-rated.

Table 4. Descriptive statistics for entrepreneurial tendency of senior high school students ($N=252$)

Variable	M	Descriptive level
Desire to gain status	3.19	moderate
Success motives	3.27	moderate
Desire to provide economic benefits	3.14	moderate
Overall	3.20	moderate

4.1.4 Correlations between entrepreneurial skill, entrepreneurial alertness, and entrepreneurial tendency of senior high school students

Pearson correlation analyses revealed significant positive relationships between all study variables. As shown in Table 5, entrepreneurial skill was significantly correlated with entrepreneurial tendency, $r(250)=0.426, p<.001$, indicating that students with higher self-reported entrepreneurial skills also reported stronger entrepreneurial tendencies. Similarly, entrepreneurial alertness was significantly correlated with entrepreneurial tendency, $r(250)=0.596, p<.001$, representing a moderate-to-strong positive relationship. These findings suggest that both predictors share meaningful variance with the outcome variable, supporting further examination through regression analysis.

Table 5. Correlations between predictor variables and entrepreneurial tendency ($N = 252$)

Predictor	r	p
entrepreneurial skill	.426**	< .001
entrepreneurial alertness	.596**	< .001

Note. p values are two-tailed. ** indicates $p < .001$.

4.1.5 Regression analysis estimating the influence of entrepreneurial skill and entrepreneurial alertness towards entrepreneurial tendency

A multiple regression analysis was conducted to examine the influence of entrepreneurial skill and entrepreneurial alertness on entrepreneurial tendency. The overall model was statistically significant, $F(2, 249) = 73.98, p<.001$, explaining approximately 37.3% of the variance in entrepreneurial tendency ($R^2 = .373$). Both predictors contributed significantly to the model. Entrepreneurial alertness had a stronger influence ($\beta=0.515, p < .001$) than entrepreneurial skill ($\beta=0.154, p = .010$). These results indicate that while both variables are significant predictors, entrepreneurial alertness is a more substantial contributor to entrepreneurial tendency among senior high school students.

Table 6. Multiple regression analysis predicting entrepreneurial tendency (N = 252)

Predictors	Entrepreneurial tendency			
	B	β	t	Sig.
entrepreneurial skill	.164	.154	2.611	.010*
entrepreneurial alertness	.512	.515	8.712	.000**
	R = .611		F = 73.984	
	R ² = .373		p = <.001	

Note. p values are two-tailed. ** indicates p < .001.

4.2. Discussion

The findings reveal that senior high school students in Kapalong, Davao del Norte exhibit moderate levels of entrepreneurial skills, entrepreneurial alertness, and entrepreneurial tendency. This suggests that while students possess foundational entrepreneurial capacities, these attributes are still developing and have not yet reached a robust or consistently manifested level. Among the skill dimensions, control focus was rated highest, whereas self-competency was the lowest, indicating that students feel relatively capable of directing their efforts but may lack confidence in their independent capabilities. This aligns with research indicating that entrepreneurial skills are developmental and often cultivated through structured education and real-world exposure (Motta & Galina, 2023; Zhao et al., 2021).

Similarly, entrepreneurial alertness across its seven dimensions—scanning and search, association and connection, evaluation and judgment, self-efficacy, intention, proactive personality, and entrepreneurial behavior—was consistently moderate. Notably, self-efficacy and proactive personality scored slightly higher, reflecting students’ growing belief in their creative abilities and initiative-taking potential. These results resonate with studies underscoring the role of experiential learning and social interaction in sharpening alertness (Lanivich et al., 2022; Almeida & Daniel, 2020). However, the moderate scores in evaluation and judgment and associative thinking suggest that critical opportunity-assessment and cross-domain connection skills require further cultivation—a gap highlighted in prior work on adolescent entrepreneurial cognition (Kahneman, 2011; Baron, 2004).

In terms of entrepreneurial tendency, success motives emerged as the strongest driver, followed by desire for status and economic benefits. This pattern indicates that students are more intrinsically motivated by learning and achievement than by external recognition or financial gain—a finding consistent with growth mindset and self-determination theories (Dweck, 2019; Ryan & Deci, 2020). The moderate overall tendency underscores that while interest exists, it has not yet solidified into firm entrepreneurial commitment, pointing to the need for more targeted motivational and support interventions within the school curriculum.

The correlational results further clarify these relationships. Both entrepreneurial skill ($r=0.426$) and entrepreneurial alertness ($r=0.596$) were positively and significantly associated with entrepreneurial tendency, with alertness showing a stronger correlation. This reinforces the notion that cognitive awareness and opportunity recognition may be more immediately influential than skill proficiency alone in shaping entrepreneurial

inclinations at this developmental stage. These findings align with Davidsson and Wiklund's (2001) Entrepreneurial Event Theory, which posits that alertness to opportunities is a central activator of entrepreneurial behavior.

Regression analysis confirmed that both predictors significantly explain variance in entrepreneurial tendency, with the model accounting for 37.3% of the variance. Entrepreneurial alertness ($\beta = 0.515$) was a substantially stronger predictor than entrepreneurial skill ($\beta = 0.154$), highlighting the pivotal role of perceptual and cognitive factors in driving entrepreneurial propensity among youth. This supports the integrated view offered by McClelland's (1961) Trait Theory and Entrepreneurial Event Theory: while inherent traits and skills provide a foundation, it is the alertness to opportunities that more powerfully channels these attributes into entrepreneurial intention.

Taken together, these results underscore the importance of educational programs that simultaneously build entrepreneurial competencies *and* sharpen students' ability to recognize, evaluate, and act upon opportunities. For senior high school students in rural settings like Kapalong, Davao del Norte, interventions that combine skill-building workshops with real-world problem-solving, mentorship, and exposure to local entrepreneurial ecosystems could effectively translate moderate potential into actionable entrepreneurial commitment.

5. Conclusions and Recommendations

This study demonstrates that entrepreneurial tendency among senior high school students in Kapalong, Davao del Norte is significantly influenced by both entrepreneurial skills and entrepreneurial alertness, with alertness emerging as the stronger predictor. While students exhibit moderate levels of skills, alertness, and tendency overall, it is their capacity to recognize, evaluate, and act upon opportunities—more so than their foundational competencies alone—that most strongly shapes their inclination toward entrepreneurship. The findings affirm that entrepreneurial propensity is not merely a function of inherent traits, but is activated and enhanced through cognitive awareness and environmental perception, supporting an integrated theoretical view of youth entrepreneurial development.

To effectively cultivate entrepreneurial tendency, it is recommended that educational stakeholders focus on two priority areas. First, curriculum designers and teachers should integrate entrepreneurial alertness training into senior high school programs through experiential learning, case-based problem-solving, and local market exposure activities. This would strengthen students' ability to scan opportunities, make connections, and exercise judgment in real-world contexts. Second, skill-building initiatives should be contextualized and confidence-focused, particularly in areas of self-competency and risk management, where students scored lowest. Workshops, mentorship, and project-based ventures can help bridge the gap between theoretical knowledge and actionable entrepreneurial intent.

Furthermore, schools and community partners are encouraged to create entrepreneurship-supportive ecosystems that provide platforms for ideation, prototype testing, and early-stage venture experience. This can help transition moderate

interest into committed entrepreneurial behavior, particularly in rural settings where economic opportunities are limited. Stakeholders can better prepare youth to contribute to local economic resilience and innovation by aligning educational practice with both trait development and alertness enhancement.

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NO CONFLICT-OF-INTEREST STATEMENT

All authors declare that they have no conflict of interest.

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