

# REVVING UP THE ROAD TO TRICYCLEPRENEURSHIP: ANALYZING THE ENTREPRENEURIAL COMPETENCY OF TRICYCLE DRIVERS IN GONZAGA CAGAYAN AS A BASIS FOR ENTREPRENEURIAL DEVELOPMENT MODEL IN THE INFORMAL PUBLIC TRANSPORT SECTOR

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## ABSTRACT

This research assessed the entrepreneurial skills of tricycle drivers in Gonzaga, Cagayan, contribute towards entrepreneurial development in the informal public transport sector. Mixed methods were used to assess the participants' competence in opportunity recognition, resource mobilization, and financial literacy. While findings reflected resource utilization strengths, the review of this literature still reveals gaps in financial literacy and strategic planning. The findings of this research bring insights toward targeted interventions for improving tricycle drivers' business sustainability.

**Keywords:** Entrepreneurial Competency, Tricycle Drivers, Financial Literacy, Informal Transport

## I. INTRODUCTION

Entrepreneurship is considered one of the toughest foundations of society. In fact, various countries have made an effort and resource in establishing policies aimed toward uplifting entrepreneurship and growing commitment to entrepreneurship education (Seikkula-Leino et al., 2019; Henry et al., 2023). Economic inequalities and poverty continue being a challenge in many countries, Ferreira et al. 2014; Neufeld et al. 2023, especially in developing countries where the informal sector plays a vital role in providing employment opportunities and contributing to economic growth (Mandal & Ghosh, 2021).

In the Philippines, informal sector constitutes a considerable proportion in its economic activity. There is an enormous amount of informal sector activity in the country, with 34.4% being the informal economy size as a share of GDP PPP levels, based on World Economics 2023. Most of the public transport operating is informal, from the tricycle drivers who are providing millions of Filipinos transportation. The National Integrated Climate Change Database and Information Exchange System said that in 2010, the Philippines had an estimated total of 3.48 million motorcycles and tricycles, accounting for more than half of the country's vehicle population.

This study is based on entrepreneurship theory and entrepreneurial competency, which have been found to be important in successful entrepreneurship. Entrepreneurial competencies determine the performance and sustainability of micro-enterprises in the informal sector. Related scholarly works have revealed that opportunity recognition, commitment, and government support are positive determinants for the sustainability performance of micro-enterprises operating in the informal sector (Morris 2023; Sitinjak, 2019). In addition, entrepreneurial competencies have been identified as a probable means of furthering the innovative performance of SMEs in the informal sector (Samsidine et al. 2022). Economic vulnerability affects entrepreneurial competencies and performance of informal microenterprises (Ayodotun, et al. 2021). Informal sector entrepreneurship activities are a contributory share of the GDPs in many countries, thus implying that entrepreneurial competencies are significant in this sector. This also gives insight into understanding the interplay between entrepreneurial competencies and performance in the informal sectors that offer insights into this theory and practice; it also helps in public policy.

The gap still exists regarding understanding the entrepreneurial competency of tricycle drivers in the informal public transport sector in the Philippines despite the growing interest in entrepreneurship research (Musara & Nieuwenhuizen, C. 2020). Previous studies explored the psychological and behavioral aspects and structural supports and environmental elements of informal entrepreneurship, and it is indicated that by identifying perceived behavioral control, personal attitude, and entrepreneurial intentions of tricycle drivers, the government will be able to identify other entrepreneurial endeavors as either viable or not prior to actual implementation to prevent waste of time,

resources, and effort (Otchengeo Jr & Akiate 2021). Furthermore, Hidalgo & Cuesta emphasized that the agenda on entrepreneurship research in informal economies is quite crucial as it applies to all regions, and the Philippines is not an exception. Much of the existing literature on entrepreneurship in the Philippines has focused on formal sector type of enterprises, yet only limited studies are available with regard to the issues and opportunities unique to informal entrepreneurs, such as tricycle drivers.

Further, the **Public Utility Vehicle Modernization Program (PUVMP)** has just begun, particularly jeepneys in Metro Manila. However, there seems to be a problem for its smooth implementation because one of the mandates is that only corporations and cooperatives can apply for a new franchise compelling every driver to come together as a single entity. The drivers were not prepared for this mandate because there was absence or lack of programs to train them for these business forms. Considering this trend, it is also expected in the future that the same program will be imposed on tricycle operators.

This has encouraged the researchers to assess the Tricycle operator's propensity to entrepreneurial endeavors which will serve as foundation in providing programs that may set them prepared in any shift of their operations that the near future may bring them. This research aims to contribute to the continuous effort for poverty reduction, SDG 1, and reduction of inequality, SDG 8, in the Philippines specifically to economic development. This study closely merges into SDG 8 that focuses on sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all by focusing on enhancing the entrepreneurial competencies of tricycle drivers (Hudek & Hojnik, 2020). The current study, therefore, aims at creating enabling enterprise environments that support entrepreneurship initiatives within the informal transport sector by examining entrepreneurial competencies by tricycle drivers. Equally, this entrepreneurial development model proposed herein shall contribute to productivity and job creation for the broader objectives of economic growth and decent work opportunities within the informal sector. This applies, particularly in developing regions such as Gonzaga, Cagayan, where informal employment is high and where entrepreneurship stands out as one of the most important preconditions linked with economic stability and growth.

## SIGNIFICANCE OF THE STUDY

The importance of the study lies in its contributions related to entrepreneurial competency and development of tricycle drivers in Gonzaga, Cagayan, and its implications on its socioeconomic, and the overall growth of the informal public transportation sector. The following are the specific significances:

1. The study can identify specific challenges that the tricycle driving industry faces, along with opportunities. Such information is useful in designing targeted interventions and support programs that meet their needs.
2. Knowing how tricycle drivers innovate, manage resources, and handle risks can help in improving their incomes and resiliency.
3. Tricycle drivers have special development needs that would guide the design and implementation of targeted capacity-building initiatives.
4. Such a model, developed in the context of entrepreneurial development among tricycle drivers based on findings, may further provide the outline for similar initiatives in other settings and contribute to best practices and effective strategies for fostering entrepreneurship within an informal public transport context.

## II. METHODS

### Research Design

The study employed a mixed-methods research design-descriptive-inferential and explanatory, which included both quantitative and qualitative methods in exploring the entrepreneurial competency of tricycle drivers in Gonzaga Cagayan.

### Locale of the Study

The study was conducted from January to October 2024 at Gonzaga, Cagayan.

### Respondents and Sampling Technique

A convenience sampling technique was used in the selection of tricycle drivers as the respondents in this study. The researchers targeted those tricycle drivers who operate within the area for at least one year.

### Data Collection Instruments and Procedures

The research collected primary data using a survey questionnaire and interviews. The survey was administered to 100 tricycle drivers, while further in-depth interviews were held with a subset of 10 tricycle drivers.

### Survey Questionnaire

The survey questionnaires consisted of closed-ended and open-ended questions and was divided into three sections. The first section used to collect demographic information. The second section explored the entrepreneurial competency of tricycle drivers. This section adopted the EntrepComp model developed by Bacigalupo et. al (2016) comprising of 3 areas and 15 competencies as shown in the table:

**Table 1:** The EntrepComp Conceptual Model by Bacigalupo et. al (2016)

Areas	Competencies
1. Ideas and Opportunities	1.1 Spotting opportunities
	1.2 Creativity
	1.3. Vision
	1.4 Valuing Ideas
	1.5 Ethical and Sustainable Thinking
2. Resources	2.1 Self-awareness and efficacy
	2.2 Motivation and Perseverance
	2.3 Mobilizing Resources
	2.4 Financial and Economic Literacy
	2.5 Mobilizing Others
3. Into Action	3.1 Taking the Initiative
	3.2 Planning and Management
	3.3 Coping with uncertainty and ambiguity
	3.4 Working with others
	3.5 Learning through experiences

A 5-point Likert scale, from strongly disagree to strongly agree, was used to measure the perceptions of the respondents in each item of the entrepreneurial competency with arbitrary points as also shown below.

- 1.00 - 1.80 Strongly Disagree
- 1.81 - 2.60 Disagree
- 2.61 – 3.40 Uncertain
- 3.41 – 4.20 Agree
- 4.21 – 5.00 Strongly Agree

For the third section, interview and focused group discussion was employed to explore more about respondents' attitude and perceptions about the entrepreneurial development of tricycle driving industry in Gonzaga Cagayan. This is done through in-depth interviews with a subset of 10 tricycle drivers. The interview was audio-recorded and transcribed. The questions explored about the tricycle driver's perceptions and experiences related to their tricycle driving and entrepreneurial competency. Focus group discussion (FGD) method was also used to substantiate the SOP 4 to bring together a group of tricycle drivers, tricycle regulators and other stakeholders in Gonzaga, Cagayan, to discuss their attitudes and perceptions on various topics related to the tricycle driving industry. Open-ended questions are used to encourage dialogue and gather insights. The information gathered from these discussions were then analyzed to understand common themes and perspectives to be used as input for entrepreneurial development and support initiatives within Gonzaga Cagayan.

**Analysis of Data/Statistical Treatment**

The surveyed data was analyzed using descriptive statistics to summarize the demographic information and the mean scores of their entrepreneurial competencies. Independent sample test and analysis of variance (ANOVA) was used to test the significant differences of mean scores of the entrepreneurial competencies of the respondents when grouped according to profile. The in-depth interview data was analyzed using thematic analysis to identify key themes and patterns related to the tricycle driver's entrepreneurial competency.

**III.RESULTS**

Most of the respondents were between the ages of 35 and 54, and 81% of them were married. The education levels of the respondents tended to be low in that most of them completed high school. Ownership of a tricycle was also 92% while the respondents' weekly earnings varied from PHP 1,261 up to PHP 2,520. In addition, most of the drivers also had other productive activities such as farming.

As perceived entrepreneurial competencies, the tricycle drivers demonstrated competency in spotting and taking an opportunity by having a mean score of 3.82, reflective of their adaptation and identification of market needs. They scored moderately high at gathering and managing resources with a mean score of 3.66, though the financial literacy was merely weak.

Financial literacy proved to emerge as an area of concern with a mean score of 2.11. In such cases, the drivers end up straining in their ability to budget, estimate costs, and make long-term financial planning. This restricts them from sustaining the business; more than this, they even seem to exhibit very limited planning skills as most of the drivers operate on a day-to-day basis without formal business plans or strategies.

**IV.DISCUSSION**

**A: Profile Variables**

The study revealed that most tricycle drivers are in the middle of their life cycle, with majority within the range of 35 to 54 years old, which indicates a mature workforce. Most drivers are married with family responsibilities and have between 1 and 3 dependents, thus indicating their financial pressures. While there are many who joined relatively recently (29 percent have been operating for five or fewer years), some have several years of experience. The majority of the drivers are high school graduates and have some college experience. Their tricycle driving earnings are also low-mostly PHP 1261–2520 per week-and the level of competition in the industry is extreme. Even at such low levels of income, 92% of the drivers are vehicle owners, and 40% of them have other additional sources of income, mainly farming. Thus, it shows the resilience of these drivers.

The findings resonate with other studies suggesting that informal sector workers such as tricycle drivers need to seek other sources of income since the income is unstable. Ipingbemi & Adebayo (2017) and Rósa (2023) established similar trends in Nigeria and the Philippines, respectively: fluctuating income and market competition. This reflection of middle-aged individuals' preferences for driving a tricycle well aligns with other research studies on transportation choice, where older people have chosen to utilize ride-hailing services to hold on to some degree of independence, according to the results of Shirgaokar et al. in 2021.

The study suggests that though tricycle drivers are resilient, they suffer from the financial strain. Policy may therefore focus on stabilization of their income by discouraging over saturation of the market and implementing supportive programs for sustainable activities such as replacing their tricycles with electric ones. Some training programs in financial literacy and business skills would help the drivers much better manage their hard-earned money and diversify their sources of income. Social protection programs for informal workers can also be further developed to offer greater security for drivers and their families.

**Table 2:** Frequency and Percentages of Respondents Profile Variable

<b>Age</b>	<b>Frequency</b>	<b>Percent</b>	<b>Educational Level</b>	<b>Frequency</b>	<b>Percent</b>
25 to 34	21	21	Elementary undergraduate	10	10
35 to 44	26	26	Elementary graduate	10	10
45 to 54	30	30	High School undergraduate	14	14
55 to 64	14	14	High School Graduate	28	28
65 to 74	9	9	Vocational Course Graduate	4	4
Total	100	100	College Undergraduate	16	16
<b>Civil Status</b>	<b>Frequency</b>	<b>Percent</b>	College graduate	17	17
Single	14	14	Total	99	99
Married	81	81	No response	1	1
Widowed	3	3	Total	100	100
Separated	2	2			
Total	100	100			
<b>Number of Dependents</b>	<b>Frequency</b>	<b>Percent</b>	<b>Driving Income per Week</b>	<b>Frequency</b>	<b>Percent</b>
0	8	8	1260 and below	5	5
1	20	20	1261 to 2520	74	74
2	18	18	2521 to 3780	18	18
3	19	19	3781 to 5040	2	2
4	16	16	more than 5040	1	1
5 and more	5	5	Total	100	100
Total	86	86			
No response	14	14			
Total	100	100			
<b>Number of years in tricycle driving</b>	<b>Frequency</b>	<b>Percent</b>	<b>Tricycle Ownership</b>	<b>Frequency</b>	<b>Percent</b>
5 years and below	29	29	Owned	92	92
6 to 10 years	26	26	Not Owned	8	8
11 to 15	13	13	Total	100	100

16 to 20 years	11	11	<b>With other source of income</b>	<b>Frequency</b>	<b>Percent</b>
21 to 25 years	5		No	60	60
more than 25 years	7	7	Yes	40	40
Total	91	91	Total	100	100
No Response	9	9			
Total	100	100			
<b>Other sources of income</b>	<b>Responses</b>		<b>Percent of Cases</b>		
	<b>N</b>	<b>Percent</b>			
Farming	19	45.24	51.35		
Construction	7	16.67	18.92		
Fishing	6	14.29	16.22		
Security guard	2	4.76	5.41		
Pension	2	4.76	5.41		
Brgy. Official Honorarium	2	4.76	5.41		
Piggery	2	4.76	5.41		
Vendor	1	2.38	2.7		
Other services	1	2.38	2.7		
Total	42	100	113.53		

**B: Entrepreneurial Competency of the Respondents**

**B.1 Ideas and Opportunities**

It has been found that tricycle drivers are very opportunistic, with a mean of 3.82, highly motivated by the urge to grab income-generating opportunities due to significant unemployment. With a mean of 3.70, they show creativity in developing new ideas, although there is room for improvement in efficiently combining resources. This consists of a mean foresight of 3.69 while planning and responding to future challenges, though translates into action would require refinement. They have moderate skills to assess ideas (mean 3.67) such that they may have to adapt based on customer's feedback and resource scarcity. Ethical and sustainable thinking is also there with the mean of 3.72 indicating responsible behavior and long-term impact.

Previous studies note that informal workers like tricycle drivers are opportune and innovative in terms of solving the economic problems. Findings by Ipingbemi & Adebayo (2017) show that the primary force behind this behavior is a source of alternative income.

Research by Ipingbemi & Adebayo (2017) confirms that a lack of alternative income sources drives this behavior. The drivers' creativity reflects observations in other studies (Blumenberg & Agrawal, 2014; Thu Diem, 2023), which highlight the adaptive nature of informal workers in managing transportation and costs. Moreover, their foresight and idea evaluation skills support studies on how informal economy participants, such as in Uriarte et al. (2021), develop strategies to anticipate market shifts and make informed business decisions.

This would mean that tricycle drivers require appropriate entrepreneurial skills upgrading, especially resource management and vision into actual steps. Innovation and sustainability-related training support could help them become more sustainable. Policy efforts may be on financial support or incentive schemes for better resource use efficiency and business strategies in the informal sectors.

**Table 3:** Competency of Tricycle Drivers in Terms of Ideas and Opportunities

<b>Ideas and Opportunities</b>	<b>Overall Mean</b>	<b>Std. Deviation</b>	<b>Descriptive Interpretation</b>
1.1 Spotting opportunities	<b>3.82</b>	<b>0.93</b>	<b>Agree</b>
1.2 Creativity	<b>3.7</b>	<b>0.86</b>	<b>Agree</b>
1.3 Vision	<b>3.69</b>	<b>0.82</b>	<b>Agree</b>
1.4 Valuing ideas	<b>3.67</b>	<b>0.75</b>	<b>Agree</b>
1.5 Ethical and sustainable thinking	<b>3.72</b>	<b>0.87</b>	<b>Agree</b>

**B.2: Resources**

The study revealed that tricycle drivers attained a high level of self-awareness and self-efficacy with an average score of 3.73, meaning that drivers feel confident in their abilities to understand strengths and weaknesses. They are forceful and persistent but have problems regarding long-term financial planning; financial literacy scored very low with 2.11. Drivers are overall capable of mobilizing resources and other human and social capitals, but competition within the

industry hinders collective action. The gaps in financial knowledge are a significant hindrance to entrepreneurial success, while the management of resources is at a moderate level.

The results reflect and align with findings of past studies, including those by Uriarte et al. (2021), in which tricycle drivers demonstrate an understanding of environmental laws and how they can render that knowledge into responsible behavior, thus fostering self-efficacy. This corroborates with Omotoy (2023) who empathized that higher self-efficacy leads to better motivation and performance which can lead to the effective utilization of resources. However, economic factors restrict them because many of them operate below the poverty level, and therefore vulnerable to losing confidence, according to Otchengco & Akiate (2021). The results regarding financial literacy tend to prove Li and Qian (2019) with a statement regarding how weak financial literacy incapacitates the decision-making capacity of microentrepreneurs. Thus, the ability by the tricycle drivers to mobilize their resources mirrors the resource-based view in that there is evidence of how tricycle drivers operate within a resource-poor environment but are able to adapt and survive.

Policy efforts should thus focus on the financial literacy of the tricycle drivers, training them further in proper planning and management of their finances. This will bring about better money management, lower stress related to finance, increases in savings, and a rise in investments among these drivers. Additionally, training that helps one improve managing resources and collaborate among drivers leads to more collective action over these industry-wide challenges.

**Table 4:** Competency of Tricycle Drivers in Terms of Resources

Resources	Overall Mean	Std. Deviation	Descriptive Interpretation
2.1 Self-awareness and self-efficacy	3.73	0.81	Agree
2.2 Motivation and perseverance	3.66	0.82	Agree
2.3 Mobilizing resources	3.66	0.8	Agree
2.4 Financial and economic literacy	2.11	0.61	Disagree
2.5. Mobilizing others	3.62	0.76	Agree

### B.3 Into Action

Initiative from tricycle drivers showed strength at high levels with a mean score at 3.62, which meant generally believed their capability to initiate value-creating processes, act independently, and take up challenges. This was nearly aligned with the opinion of Arini et al. (2020), who pointed out that initiative is highly interlinked with entrepreneurial activities, leads to economic participation, and eliminates poverty. Tricycle drivers, who hail from the informal sector, also exhibit resourcefulness in exploiting opportunities around them that augment their entrepreneurial capacity.

Skills in Planning and Management were low in terms of its mean score at 2.62 with a high standard deviation at 0.89 indicating vagueness as well as variability of response. The drivers were worried about their ability to set goals, particularly in terms of working independently, where a huge standard deviation of 1.275 suggests that the spread of confidence is wide. A weakness in planning skills is critical because according to Petrunoff et al. (2017), good planning in entrepreneurial endeavors must be implemented appropriately. According to Cruz et al. (2023) arguments, ergonomic and economic factors can also prove worse and result in stress and uncertainty. This may result in a lack of confidence in goal setting, further limiting their entrepreneurial approach.

In contrast, tricycle drivers manifested a very high capacity for coping with uncertainty, ambiguity, and risk with a mean score of 3.57 and a relatively low standard deviation of 0.74, which states that generally they were homogeneous about their favorable ability in deciding under uncertain circumstances. This is supported by Wang et al. (2023), who indicated that better decisions are usually made by the people who perceive risks well. Due to the inherent uncertainty of road conditions and changing demands of passengers, drivers need to adapt rapidly to mitigate and address risks in real-time. The similarity of the responses in this aspect implies that the drivers share confidence in their ability to navigate uncertainty, which is crucial for their survival and entrepreneurship.

Working with Others is the other notable area of deficit, which stands at a mean score of 2.47 and with the standard deviation of 0.75, reflecting the concerns about collaboration. Tricycle drivers operate in a very competitive environment, which really hinders the potential to network or work in teams. According to Aydinan (2020), communication and collaboration are said to be essential in safety and efficiency but are discouraged by bad governance and weak conflict resolution from Duijn et al. (2022). This struggle with collaboration further fuels individualism, which undermines collective action among drivers.

On the other hand, tricycle drivers scored the highest in Learning Through Experience with a mean score of 3.68 and a standard deviation of 0.83, meaning that drivers agreed that learning through experience was valuable. Drivers believe in learning from successes and failures, which is crucial in enhancing entrepreneurial skills, as supported by Liu et al. (2023). This strength is vital in informal economies because drivers are always changing and adapting according to practical experiences. Moreover, as Amankwah-Amoah et al., (2021) reflected, learning from failure

acted as the base of future success, thus grounding the importance of experiential learning for tricycle drivers. However, structured processes of self-reflection or peer learning, as guided by Ezezika & Gong (2020), could further facilitate their problem-solving skills and entrepreneurship development.

While tricycle drivers show strengths in initiative, coping with uncertainty, and learning through experience, they have severe weaknesses in planning and management and inter-personal collaboration. Coaching to combat these weaknesses through goal setting, teamwork, and resource mobilization would be great investments in building their entrepreneurial success. Formulated support structures and experiential learning mechanisms would further enhance their developmental edge as they compete in a context that is highly turbulent.

**Table 5:** Entrepreneurial Competency in terms of Into Action

Into Action	Overall Mean	Std. Deviation	Descriptive Interpretation
3.1 Taking the initiative	3.62	0.801	Agree
3.2 Planning and management	2.62	0.89	Uncertain
3.3 Coping with uncertainty, ambiguity and risk	3.57	0.74	Agree
3.4 Working with others	2.47	0.75	Disagree
3.5. Learning through experience	3.68	0.83	Agree

**C. Test of Significant Differences of Entrepreneurial Competencies When Group According to Profile Variables**

Test of profile variables lead to significant and non-significant results in analyzing the entrepreneurial competencies of the respondents. No significant differences were observed based on the age of the respondents, their civil status, driving hours, and those having or no other sources of income, as tested with the help of ANOVA and independent sample tests. However, considerable variations in some of the major factors have been noticed for other variables. For instance, based on the **number of dependents**, there were considerable variations in the following competencies: **Taking Initiative**, ( $p = 0.036$ ); **Coping with Uncertainty, Ambiguity and Risk**, ( $p = 0.047$ ); **Working with Others**,  $p = 0.048$ . **Number of years of operation** also showed considerable variation in **Taking Initiative**,  $p = 0.05$  and **Coping with Uncertainty, Ambiguity, and Risk**,  $p = 0.021$ . While other variables than the selected competencies did attain considerable correlations, the most important found relation was with **educational level** with different competencies, **Vision** ( $p = 0.048$ ), **Ethical and Sustainable Thinking** ( $p = 0.011$ ), **Financial and Economic Literacy** ( $p = 0.034$ ), **Mobilizing Others** ( $p = 0.032$ ), and **Learning Through Experiences** ( $p = 0.042$ ). **Weekly income levels** also yielded highly significant differences for **Spotting Opportunities, Creativity, and Working with Others**, with scores on the latter two significantly more favorable for the lower-income group,  $p = 0.034$ . **Ownership status** was correlated with **working with others**,  $p = 0.035$ .

A post hoc LSD test helped to highlight the nature of those differences' findings on the relationship between dependents and entrepreneurial competencies of tricycle drivers reveal important information. Among them, a pattern indicating respondents with fewer dependents have had a stronger propensity to take initiative compared to those having more dependents ( $p = 0.011$ ). This is consistent with the notion that those with lesser responsibilities may have a greater opportunity of manifesting proactive behaviors as articulated by Arpiainen & Kurczewska (2017), who point out that how one can better deal with uncertainty and risk represents some of the most significant competencies that experience generates. The findings were on the contrary as respondent's ability to cope with uncertainty, ambiguity, and risk is more enhanced when having more dependents ( $p = 0.037$ ). This research finding is also in line with Liu (2019) in which the study on the resilience of entrepreneurs explains that people experiencing more responsibility have developed some coping mechanisms that enable them to handle risks effectively (Liu, 2019). In addition, Eriksson et al. (2019) argue that entrepreneurial competencies act as an enabler of business model innovation, though it is also plausible that people with more dependents could learn from experience to transform and innovate in entrepreneurial businesses.

For years of operation, this study found that those who have been operational for a greater number of years were significantly lesser in score in Taking Initiative ( $p = 0.006$ ) and Coping with Uncertainty, Ambiguity, and Risk ( $p = 0.002$ ) compared to those with fewer years of operation. This finding is not well-supported in recent literature. For example, Pritchard et al. (2023) argue for the necessity of coping skills in managing occupational risks, suggesting that better coping mechanisms develop over time and are directly correlated with increased initiative and adaptability in uncertain situations. Additionally, Kajiwara (2021) states that older, more experienced drivers tend to exhibit enhanced coping skills during unexpected occurrences, showing a positive relationship between experience and coping ability with uncertainty. Perhaps, this might be attributed to the notion that experienced and established entrepreneurs will be more cautious by which Mamun and Fazal (2018) have mentioned that experienced entrepreneurs would like to focus on stability rather than being aggressive about growth. In the established business setup, entrepreneurial orientation is very important but tends to shift toward a careful approach rather than an aggressive orientation. Mamun et al. (2019) also note that experienced entrepreneurs may focus more on maintaining their business, with a

conservative approach toward innovation and risk compared to new entrepreneurs who are very aggressive in taking initiative in seizing every opportunity. Thus, on the other hand, new entrepreneurs are more proactive and risk-prone compared to others, driven by the need to establish their ventures within highly competitive markets (Soegoto et al. 2023)

Regarding educational level, respondents with higher educational qualifications gave significantly higher scores in the competencies of Vision ( $p = 0.044$ ), Ethical and Sustainable Thinking ( $p = 0.006$ ), Financial and Economic Literacy ( $p = 0.014$ ), and Learning Through Experience ( $p = 0.02$ ). This supports the positive correlation between education level and entrepreneurial competency development, consistent with previous research. Studies have shown that higher education enhances cognitive abilities, critical thinking, and problem-solving skills, which are crucial for entrepreneurship (Bae et al., 2014). Additionally, education fosters better financial literacy and ethical decision-making, key components in business management and sustainability (Robles & Zárraga-Rodríguez, 2015). These findings align with the evidence that formal education provides the foundation for developing entrepreneurial skills, improving competency in these areas

A higher weekly income was also considerably associated with stronger entrepreneurial competence in Spotting Opportunities ( $p = 0.006$ ), Creativity ( $p = 0.011$ ), and Working with Others ( $p = 0.026$ ). This consolidates the positive association between income level and entrepreneurial competencies, supported by existing literature. According to Promma, (2023), there is a strong positive relationship between higher income levels and developing the required skills that indicate successful entrepreneurship. Higher-income earners have more resources to invest in ventures that can improve their competencies. Additionally, Lecuna (2019) supports the idea that high incomes are positively related to entrepreneurial activities and that individuals with higher incomes are more likely to possess the competencies required to venture into entrepreneurship. Studies foundational studies show that individuals with higher income tend to have more access to resources, better networks, and greater opportunities for risk-taking, all of which contribute to enhancing entrepreneurial skills (Fairlie & Robb, 2008). Higher income allows for reinvestment into one's business, which can foster creativity and collaboration (Davidsson & Honig, 2003). Moreover, income stability enables entrepreneurs to take calculated risks, further promoting opportunity recognition and innovation (Van Praag, 2003).

Profile Variables	Results/Competency	Statistical test used	p-value
Age	No significant differences	ANOVA	-
Civil status	No significant differences	Independent sample test	-
Number of dependents	With significant differences:	ANOVA	
	Taking Initiative		0.036
	Coping with uncertainty, ambiguity and risk		0.047
	Working with Others		0.048
Years of operation	With significant differences:	ANOVA	
	Taking Initiative		0.05
	Coping with uncertainty, ambiguity and risk		0.021
Educational Level	With significant differences:	ANOVA	
	Vision		0.048
	Ethical and sustainable thinking		0.011
	Financial and economic literacy		0.034
	Mobilizing others		0.032
	Learning through experiences		0.042
Weekly Income	With significant differences:	ANOVA	
	Spotting Opportunities		0.017
	Creativity		0.044
	Working with Others		0.034
Ownership Status	With significant differences:	Independent sample test	
	Working with Others		0.035
Driving Hours	No significant differences	ANOVA	-
Other source of income	No significant differences	Independent sample test	-

## D. Attitude and Perceptions of Tricycle Drivers in Gonzaga Cagayan

### D.1 Future of the Tricycle Driving Industry

The future of the tricycle industry faces challenges due to increasing competition from households owning personal vehicles, which could reduce the demand for tricycle services. As one respondent said, “Gapo ta nalaka lang ti singir mi, ma’am,” (Because our fare is just low, ma’am) reflecting the affordability of tricycle fares compared to other forms of transport like multicabs, which may help keep them competitive.

#### **D.2 Viability and Sustainability of the Tricycle Driving Business**

Tricycle drivers face barriers to sustainability, including high operational costs and rising fuel prices. Respondents raised concerns about the growing number of private vehicles like e-bikes. One respondent remarked on how they manage daily income: “Awan met ma’am ti kasdiy...basta makompleto metlang daytuy papel a ma’am,” (There's none like that, ma'am... as long as the paperwork is complete, ma’am) referring to the financial challenges in sustaining their tricycle business despite its seasonal viability, such as during school days.

#### **D.3 Entrepreneurial Competence Relevance in Thriving in Tricycling Business**

Entrepreneurial competency, such as financial management and customer service, is viewed as essential for improving business outcomes. One respondent mentioned, “Wen, ma’am, sikami nukwa iti agmekmekanikon iti tricy min,” (Yes, ma'am, we're the ones who fix our own tricycles) showing how skills like maintenance are part of their strategy to sustain their operations, ensuring they thrive in a competitive environment.

#### **D.4 Program on Entrepreneurship of Tricycle Drivers**

Drivers are open to programs that could help them manage their finances, improve operations, and enhance customer service. Respondent 6 shared, “Wen a, ma’am. Mayat met no adda kasta nga trainings. Iti napintas kuma a ma’am ket food processing... no saan to nnga siakon a ket nenton baket,” (Yes, ma'am. It would be good if there are trainings like that. What would be nice, ma'am, is food processing... if it's not me, maybe my wife will join) expressing interest in programs that would provide relevant skills and knowledge, including the possibility of forming cooperatives to access resources more efficiently.

#### **D.5 Support of the Local Government on Tricycle Driving Industry**

While the respondents perceive the local government as generally supportive, they note that more targeted help is needed. For example, “Adda met iti gas subsidy ngem awan met ited da,” (There is a gas subsidy, but they don't give it) suggests a gap in the financial support they receive, such as fuel subsidies. Additionally, one respondent rated the local government's support as a 6/10, acknowledging help from agencies like the DSWD but wishing for more practical assistance.

#### **D.6 Interest in Joining Entrepreneurial Development Program for Tricycle Drivers**

Tricycle drivers show high interest in joining entrepreneurial programs, particularly those focused on safety, vehicle maintenance, and financial management. One respondent expressed enthusiasm for these initiatives: “Wen, ma’am, basta adda iti dumananon nga surat,” (Yes, ma’am, as long as we receive the letter) indicating their readiness to participate if they receive proper communication and invitations.

## **V. CONCLUSIONS**

The tricycle drivers in Gonzaga, Cagayan, have successfully demonstrated entrepreneurial skills in terms of opportunity recognition, self-awareness, perseverance, and experiential learning. They obtain knowledge about peak hours, monitor the market, and take advantage of community-sourced information by increasing their income earnings. Self-awareness and resilience help them cope with challenges and continuously do entrepreneurial activities. Important limitations prevent them from being sustainable; on the other hand, financial literacy was lacking among others since many of them lacked sufficient skills regarding sure decisions and investments. Its operational growth and vehicle maintenance are constrained by the absence of business planning and management practices. The lack of teamwork is another major constraint that further weakens their ability to grow together since most of them operate individually, hence decreasing the extent to which they may bond as drivers. Interventions in these kinds of challenges are supposed to arise from the actions of local government units, non-governmental organizations, and educational institutions. Financial literacy training, business planning workshops, and fostering a collaborative culture through cooperatives might dramatically better their sustainability and their collective bargaining power.

## **VI. RECOMMENDATIONS**

Entrepreneurial training for tricycle drivers be considered in a more directed towards financial education, especially on how to manage business, along with good customer service. It should include financial planning, budgeting, and saving. The organizing of drivers into cooperatives would enhance resource sharing and bargaining power. Customer service training and community partnerships can also improve client satisfaction and effectively optimize business operations.

Importantly, the government would consider crafting a more facilitative policies and implementation towards total shift of informal operations of tricycle drivers to a more formal to make it more organized in providing subsidies on petrol, regulating fares, giving safe terminals, and access to micro-financing. Local stakeholders need to collaborate to bring the program in line with economic and transport policies. Regulation compliance, safety, vehicle maintenance, and long-term planning will ensure that the drivers stay sustainable and minimize risks.

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