

Financial literacy and entrepreneurial behavior of Junior high school students: Basis for TLE management plan

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ABSTRACT

This research assesses the Junior High School students' financial literacy and its impact on their entrepreneurial behavior at Moalboal National High School for the school year 2022 - 2023 based on the TLE Management Plan. The research utilized a descriptive method of research to accurately and systematically describe the profile, financial literacy, and entrepreneurial behavior of the respondents who were chosen randomly using the fishbowl technique. Furthermore, a correlational study is also employed to determine the significant relationship between respondents' financial literacy and entrepreneurial behavior. This study utilizes a standardized survey questionnaire for financial literacy retrieved from Jorgensen (2007) while for entrepreneurial behavior patterned from Abun, Foronda, Agoot, Belandres, and Magallanez (2018). It was revealed that respondents' age range from 12 to 17, where there are a greater number of women than men, the majority of them are full-time students, very few are engaged to work, and a majority of their family income is below 20,000.00php; financial knowledge, attitude, and behavior are moderately average, entrepreneurial behavior is high or more than the average but not very high; demographic profile has significant relationship with financial literacy; demographic profile is not significant to their entrepreneurial behavior; financial knowledge and behavior do not have significant relationship with entrepreneurial behavior, but financial literacy does. It can be concluded that financial literacy as to financial attitude is a determinant of entrepreneurial behavior, presumably so as with financial knowledge and behavior if they were only fully developed. It is recommended to integrate financial literacy and entrepreneurial behavior extensively in the curriculum of secondary education.

1. Introduction

Financial literacy has been found to be a key factor towards entrepreneurial success, which is also driven by attitude and behavior, most especially in the fast-paced and unstable economy nowadays. Sarsale (2021) confirmed this by stressing that financial literacy and the entrepreneurial mind of the citizens are highly in demand due to the increasing complexity of the business arena caused by the fast-paced industrial revolution that leads to challenging the current business landscapes as it brings more intricacies in the market as the competition levels up

globally. This demand for financially literate and entrepreneurial-minded individuals calls for more efforts and research undertakings in this field for continual development. Barte (2012), as cited in Usama and Usuf (2019), stated that entrepreneurs become vulnerable to information asymmetries if the financial market's complexity is not commensurate with the growth of financial literacy. Hence, financial literacy should be given attention to address such vulnerability.

The significance of financial literacy and entrepreneurial behavior toward the challenges brought on by the unstable pace of the economy cannot be understated which needs to be taken seriously through research endeavors considering students as subjects.

According to Sarsale (2021), financial literacy positively correlates with entrepreneurial traits and does not significantly correlate with gender or senior high school strands, raising concerns about the usefulness of the Accountancy, Business, and Management (ABM) Strand in fostering both of these traits. Usama and Usuf (2019) discovered that entrepreneurs' performance was statistically impacted by their financial literacy, adding support to the body of literature that suggests financial literacy is a key factor in the success of entrepreneurial businesses. According to Diawati and Juwita (2019), an organization's success is impacted by an entrepreneur's actions. According to Segura and Zamar (2019), research into financial education and how it relates to creative entrepreneurship is becoming important in both developed and developing nations. According to studies by Jayaraman, Jambunathan, and Counselman (2018); Montalbo, Pogoy, Av, and Pepito (2017); Messy and Monticone (2016), developing nations have a very low level of financial literacy, which is concerning for their economic development.

Based on the recently conducted research above, financial literacy has been empirically proven to be a factor that affects the prudent entrepreneurial decisions of potential entrepreneurs. Furthermore, entrepreneurship and small to medium enterprises hold an important role in the economy of a nation. Hence, the development of financial literacy and entrepreneurial behavior should be given ample attention, especially in school, for students to be prepared to face the unforgiving reality of life, especially in these times of immense economic crisis brought by the pandemic. Iqbal, Melhem, and Kokash (2012) emphasized that entrepreneurial knowledge and skills may help the issue of unemployment and boost the nation's economic standing. Unfortunately, in most curricula, financial education is not seen as a crucial subject in the development of student competencies. This situation has the potential to skew adult decisions that depend on an individual's understanding of economics and finances. The understanding of the relationships between economic and financial topics will be used repeatedly, especially while conducting an economic pursuit (Segura & Zamar, 2019).

The conduct of this study is very timely and relevant particularly since developing countries like the Philippines are confronting immense economic instability and high unemployment rates in this study would enable the potential entrepreneurs to be financially educated or literate which would eventually lead them to become financially independent despite economic crisis, as they can make prudent financial and entrepreneurial decisions. Moreover, this will become a basis for revising basic educational curricula that will give more importance to financial education and entrepreneurial efforts to the students who will be the forerunners of the future economy. It is presumed that a financially literate people lead to a financially independent nation.

Thus, in order to address the emerging issues of financial education and entrepreneurship, this study aims at assessing financial literacy and its impact to the entrepreneurial behavior and attitude of junior high school's students which will be basis for technology livelihood education management plan.

2. Theoretical basis

This study presumes that the financial literacy of the respondents influences their entrepreneurial behavior. This presumption is supported by Theory of Self Efficacy, Theory of Planned Behavior (TBP) and “Youth Entrepreneurship Act”. This section of the paper will likewise elucidate on the concepts of financial literacy and of entrepreneurial behavior.

Bandura (1997) as cited in Muizzuddin, Ghasarma, Putri, and Adam (2017), stated that self-efficacy is a set of mental, social, and emotional skills that each person possesses. This notion pertains to how people control their capacity to comprehend financial products and services, to be knowledgeable about a variety of financial products and services that are constantly dynamic and fluctuating.

Additionally, Bandura (1997) as cited in Muizzuddin et al. (2017) outlines the psychological mechanism by which self-efficacy influences human functions, including cognitive, which enables people to anticipate current events that may have an impact on the future; motivational, optimistic thinking that appears to accomplish what had been planned; affective, which naturally determines a person’s emotional experiences; and selective, which allows people to choose the appropriate behavior and environment.

According to the theory of planned behavior of Ajzen (1991) as cited in Cameron, Ginsburg, Westhoff, and Mendez (2012), a person’s intentions are more crucial in determining their behaviors than their attitudes about those activities, which are only supposed to influence intentions. The foundation of the theory is the idea of intentions, which are characterized as a person’s drive and conscious choice to put in effort to produce a behavior.

When there is little time between them and an acceptable level of precision exists between the intention and the action to be conducted, it is anticipated that the relationship between intention and action will be stronger. The theory contends that when it comes to entrepreneurship, as it is an intentional activity, intentions are a stronger indicator of success than personality, demographics, attitudes, or beliefs.

Financial knowledge refers to having knowledge of financial ideas and practices, as well as using this expertise to address financial issues. It is the ability to manage money for many purposes, including keeping track of daily financial issues in the market and making the best decisions for “financially literate” people’s requirements. Financial skills refer to the capacity to apply knowledge and understanding to manage a predictable or unpredicted circumstance in order to solve a financial problem and turn it into a benefit or opportunity to one’s advantage. Financial attitude refers to the motivation and willingness to apply economic and knowledge-based abilities in a variety of life circumstances.

Financial behavior refers to the behavior of the financial market in particular circumstances (Świecka, Grzesiuk, Korczak, & Kaniewska, 2019). Many claim that attitude is important. It causes them to act in a particular way. In actuality, a person’s action reveals both their attitude and their true nature. Entrepreneurial behavior is a subject of individual feelings, thoughts, and donations toward entrepreneurship rather than just a matter of personal perspective. It is taken into account as a function of value, belief, and entrepreneurship favorability. It is posited that Need for achievement, Need for autonomy, Creative Tendency, Calculated risk-taking, Drive and Determination (Abun et al., 2018).

Need for achievement is the most prevalent theory of entrepreneurship which exhibits a strong desire to assume personal responsibility, to set and meet moderately difficult goals, and to receive performance feedback. Likewise, studies indicate that achievement motivation is a valid

predictor of entrepreneurial behavior. The concept of Need for autonomy is from self-determination theory which contends that people tend to be curious about their surroundings and interested in learning and expanding their knowledge. The notion that one's acts come from within and are unique to oneself is what is meant by autonomy (Abun et al., 2018). Creative tendency refers to a capacity to generate novel ideas in order to solve issues and take advantage (Abun et al., 2018). Calculated risk-taking indicates that the businessperson is opportunistic and seeks knowledge and advice to determine whether it is worthwhile to pursue the opportunity, which will typically involve some risks (Caird, 2013). Gould (2014) argues that drive is an innate feature that leads one to challenge the existing quo rather than simply accept it. People are motivated to climb higher and higher because of this motivation.

3. Methodology

This research study utilizes descriptive method of research to accurately and systematically describe the profile, financial literacy and entrepreneurial behavior of the 120 student-respondents who were chosen randomly using fish bowl technique at Moalboal National High School, Moalboal Cebu Province. Furthermore, a correlational study is also employed to determine the significant relationship between respondents' financial literacy and entrepreneurial behavior.

This study utilizes a standardized survey questionnaire for financial literacy retrieved from Jorgensen (2007) while for entrepreneurial behavior patterned from Abun et al. (2018). Part 1 contains the profile of the respondents in terms of age, gender, grade level, full-time or part-time, working or regular students, and family income. Part 2 contains the level of financial literacy of the respondents on the aspects of financial knowledge and financial behavior. Financial literacy is composed of three aspects Financial Knowledge, which uses a 3-point Likert scale, Financial Attitude which uses 4-point Likert scale and Financial Behavior which uses a 5-point Likerts scale. Entrepreneurial behavior has five (5) components, and each component use 5-point Likert scale.

Prior to the conduct of the study, permission was expressed and the consent forms were explained by the researchers and signed by the participants confirming their voluntary participation. When data were collected, simple Percentage was used to describe the profile of the respondents as to age, gender, and grade level. Weighted Mean was used to determine the student level of financial literacy and entrepreneurial behavior. ANOVA was used to determine the significant relationship between the respondents' financial literacy and entrepreneurial behavior.

4. Result and discussion

This part presents the demographic profile of the students as to age, gender, grade level, status (working and fulltime), and income.

Table 1

Demographic profile (N = 120)

Aspects	Frequency	%
Age		
12 - 14	69	57.50
15 - 17	49	40.83
18 - 20	2	1.67

Aspects	Frequency	%
Total	120	100
Gender		
Male	51	42.50
Female	69	57.50
Total	120	100
Grade Level		
7	30	25
8	30	25
9	30	25
10	30	25
Total	120	100
Full Time Student		
Yes	103	85.83
No	17	14.17
Total	120	100
Working Student		
Yes	9	7.50
No	111	92.50
Total	120	100
Income		
25,001 above	10	8.33
20,001 - 25,000	3	2.50
15,001 - 20,000	29	24.17
10,001 - 15,000	19	15.83
5,000 - 10,000	32	26.67
5,000 below	27	22.50
Total	120	100.00

Age. The table indicates that age bracket 12 - 14 has the greatest number of respondents while bracket 18 - 20 has the least with only two (2) respondents. This data conforms to the usual age bracket of junior high school students in the Philippines which ranges from 12 - 16. Firlri (2017) has considered age as an indicator of financial literacy and according to him younger individuals have lower financial literacy compared to those who are older. Hence, this study included age as one of the demographic profiles of the respondents.

Gender. It is indicated on the table that there are more female respondents than male respondents. Gender is believed to be an indicator of financial literacy according to numerous

studies. Margaretha and Pambudhi (2015) as cited in Herliani, Zainal, and Thohiri (2018) found that gender influences financial literacy of an individual.

Grade level. It can be seen on the table that there is an equal number of respondents from Grades 7 - 10. Grade level may be related to age as an indicator of financial literacy since the premise is that the higher the grade level the older and the more mature the students is which will influence financial literacy. Potrich, Vieira, and Kirch (2015) revealed that those with higher educational levels would have stronger financial literacy.

Student's status (Full-time/working). The majority of the respondents are full-time students, and only a few are working students. There are no existing studies explicitly stating that this kind of student's status is an indicator of financial literacy; however, the researcher presumed that students who are exposed to finances, like working students, are more literate financially as they know the value of each peso that they hardly earned from work. Hence, this presumably becomes an indicator.

Income. As indicated on the table, more than half of the respondents has a family income of below 15,000php while less than half has a family income ranging from 15,000php to above 25,000php. Nidar and Bestari (2012); Keown (2011) found out that family income has a significant influence to students' financial literacy.

To sum up, Respondents' age is ranging from 12 - 17, where there are a greater number of women than men, majority of them are full-time students, very few are engaged to work, and majority of their family income is below 20,000.00php.

Table 2

Financial literacy (N = 120)

Indicators	\bar{x}	Verbal Description
Financial Knowledge	1.79	S
Financial Attitude	2.94	A
Financial Behavior	3.34	U

Legend: 2.34 - 3.00 (Always), 1.67 - 2.33 (Sometimes), 1:00 - 1.66 (Never) -Financial Knowledge

Legend: 3.25 - 4.00 (Strongly Agree), 2.50 - 3.24 (Agree), 1.75 - 2.49 (Disagree), 1.0 - 1.74 (Strongly Disagree) - Financial Attitude

Legend: 4.21 - 5.00 (Always), 3.41 - 4.20 (Usual), 2.61 - 3.40 (Sometimes), 1.81 - 2.60 (Rarely), 1.00 - 1.80 (Never) - Financial Behavior

As indicated in the table, financial knowledge obtained an average weighted mean of 1.79, which is verbally described as **Sometimes**; while financial attitude obtained an average weighted mean of 2.94, which is verbally described as **Agree**; and Financial Behavior obtained an average weighted mean of 3.34, which is verbally described as **Usual**.

The low financial knowledge of the respondents implies low financial literacy which may lead to mismanagement of money and poor financial practices and decisions. Świecka et al. (2019) state that when a person is financially knowledgeable, he has the ability to manage money and make the best financial decisions. Hence, this further implies that respondents of this study should be exposed to and or be educated with financial concepts that would help them manage their finances wisely and make sounder financial decisions.

The average weighted mean obtained for financial attitude implies that the respondents' low financial knowledge influences their financial attitude, resulting in average agreement with

most of the indicators for financial attitude. This is supported by the study of Robb and Woodward (2011) as cited in Rai, Dua, and Yadav (2019) as they revealed that financial knowledge has a significant effect on one's financial attitude and behavior, regardless of whether it is objective or subjective, and that this is a crucial aspect in determining one's financial literacy and decision-making abilities.

Moreover, this average agreement implies the need to strengthen the exposure of students to financial literacy, which would help them foster positive attitudes toward finances in order for them to make sound decisions in spending, saving, and investing. The development of a positive financial attitude is deemed necessary as it is found out in the study conducted by Mien and Thao (2015) as cited in Adiputra, Suprastha, and Tania (2021) that a person's financial attitude affects how they spend and save, hoard, and waste money. Hence, financial attitude needs to be strengthened as it affects sound decision-making towards finances.

The average mean or financial behavior suggests that the respondents practiced the learned financial knowledge in majority of cases. This further means that the respondents have the potentials and capabilities of managing everyday finances, including planning, budgeting, checking, managing, controlling, and storing. According to Nuringtyas and Kartini (2023), a person who has positive financial behavior is the one being able to regulate, monitor, manage, and store daily funds; plan, budget, check, manage, and control them. This confirms that the respondents have the potentials in making sound financial practices and decisions.

However, the set data still implies that the respondents' financial behavior needs to reach its full development in order for them to make sounder financial decisions and practices. This further implies that the development of financial literacy in schools should be considered a priority, for financial behaviors are crucial for deciding not just one's own financial well-being but also the stability of the domestic and global economies (Mudzingiri, Muteba Mwamba, & Keyser, 2018).

Table 3

Entrepreneurial behavior (N = 120)

Factors	\bar{x}	VD
Need for achievement	3.96	T
Need for autonomy	3.14	ST
Creative Tendency	3.37	ST
Calculated Risk Taking	3.51	T
Drive and determination	3.75	T
Factor Average Mean	3.55	T

Legend: 4.21 - 5.00 (Very True), 3.41 - 4.20 (True), 2.61 - 3.40 (Somewhat true), 1.81 - 2.60 (not true), 1.00 - 1.80 (Not at all true)

The table above shows the obtained average weighted mean of the five (5) factors of entrepreneurial behavior. As reflected in the table, the need for autonomy and Creative Tendency obtained the lowest average weighted mean which is between 2.61 - 3.40, which are verbally described as Somewhat True, while the other three factors - Need for achievement, Calculated Risk Taking, and Drive and determination - obtained an average weighted means of 3.96, 3.51, and 3.75, which are all verbally described as True. There is no single indicator that obtained an

average weighted mean of 4.21 and above or described as Very True. Overall, the financial behavior of the respondents is 3.55 or verbally described as True.

The weighted mean for 'Need for achievement' suggests that the respondents are very determined to achieve their desired goals. Moreover, respondents are willing to take responsibility, meet slightly difficult goals, and sacrifice things to achieve goals, as indicated in the statements with True verbal descriptions. These are in consonance with the posits of entrepreneurial behavior in terms of the need for achievement as per Carney (1995) as cited in Abun et al. (2018) when he stated that people with high levels of NACH show a strong motivation to take on personal responsibility, create and achieve moderately challenging goals, and get performance feedback. The high level of respondents' NACH indicates strong motivation to achieve goals which heeds for practices or interventions that would make their motivations become stronger. McClelland (1961) as cited in Abun et al. (2018), stated that nACH is crucial to economic development. Therefore, any nation seeking to hasten economic advancement should be interested in boosting levels of achievement inside its boundaries. Hence, the high level of need for achievement of the respondents still needs to be fully developed as it is proven crucial to any nation aiming for economic advancement.

The weighted mean for 'Need of Autonomy' suggests that the respondents are moderately independent. In fact, respondents do not like to do new things and are happy when someone takes the lead in the group, which are negative indicators of the need for autonomy. According to the self-determination theory, people tend to be curious about their surroundings and interested in learning and expanding their knowledge (Deci & Ryan, 2000, as cited in Abun et al., 2018). Hence, disliking doing new things does not tend to show curiosity which is an indicator of the need for autonomy. Moreover, Angyal (1941) as cited in Abun et al. (2018), claims that the desire for autonomy leads the individual person to be independent and differentiated from other people and the environment. Hence, being happy when someone takes the lead does not foster independence.

The weighted mean for 'Creative Tendency' suggests that the respondents do not have this full capacity to produce novel and useful ideas that will enable them to solve or address problems. According to Ward (2004) as cited in Abdul Rahim, Wan Ismail, Thurasamy, and Abd. Rahman (2018), creative and practical ideas are the foundation of entrepreneurship since an entrepreneur's capacity for opportunity seeking and idea generation are essential skills. Hence, the moderate creative tendency of the respondents constitutes a weaker foundation of entrepreneurial behavior. This implies necessary further interventions or actions that would develop respondents' creative tendency since an individual's predisposition to engage in entrepreneurship increases with their level of creativity, and this is likely to have an impact on the degree and type of originality in their firm (Koellinger, 2008).

The weighted mean for 'Calculated Risk-taking' means that the respondents are opportunistic and are persistent in seeking knowledge and pieces of advice to chase opportunities that involve risk. In a nutshell, respondents are not afraid of taking risks and are bold in making uncertain decisions. Caird (2013) claimed that a businessperson is a risk taker who is opportunistic and seeks knowledge and advice to determine whether it is worthwhile to pursue the opportunity, which will typically involve some risks. According to Bolton and Lane (2012), taking personal risks involves making audacious decisions such as stepping into the unknown, taking on large debt, and/or investing a significant amount of money in risky endeavors. These literatures confirm that the respondents possess the desire to take risks which is a good indicator of entrepreneurial behavior. This implies that respondents' high entrepreneurial behavior as to

calculated risks is a good indicator of entrepreneurial behavior. However, it could still imply that some areas of entrepreneurial behavior as to calculated risk need to be improved, for the respondents are still uncertain of some risk statements. Hence, actions that will improve those weak points are heeded.

The weighted mean for 'Drive and Determination' suggests that the respondents are willing to level up and get out of their comfort zones to the extent of challenging the status quo. This is in line with the contention of Gould (2014) which states that drive is an innate attribute that encourages people to challenge the status quo instead of simply accepting it and pushes them to achieve ever-higher goals. He added that a person with drive knows no content. Abun et al. (2018) also stated that what makes an entrepreneur is determination as it causes their successes and failures. Hence, the high level of drive and determination among respondents is a positive indicator of their entrepreneurial behavior. However, interventions could still be done to further improve the drive and motivation of the respondents.

Table 4

Relationship between respondents' demographic profile and financial literacy

Null Hypothesis	Test	Significance	Decision
The distribution of financial literacy is the same across categories of age	Independent Samples Kruskal Wallis Test	.561	Retain the hypothesis
The distribution of financial literacy is the same across categories of gender.	Independent Samples Kruskal Wallis Test	.481	Retain the hypothesis
The distribution of financial literacy is the same across categories of grade level	Independent Samples Kruskal Wallis Test	.004	Reject
The distribution of financial literacy is the same across categories of family monthly income	Independent Samples Kruskal Wallis Test	.000	Reject
The distribution of financial literacy is the same across categories of full-time student	Independent Samples Kruskal Wallis Test	.860	Retain the hypothesis
The distribution of financial literacy is the same across categories of working student	Independent Samples Kruskal Wallis Test	.180	Retain the hypothesis

The significance level is at .05

Age and Financial literacy got a .561 significance value, which is more than the 0.05 significance level, which resulted in accepting the null hypothesis. This means that age does not have any significant relationship to a person's literacy on finances. This is in contradiction to the findings of Firli (2017) he claimed that age is among the indicators of financial literacy among college students in the United States. Likewise, in the study of Ansong and Gyensare (2012) as cited in Herliani et al. (2018), age is discovered as one of the characteristics that influence financial literacy.

It is presumed that the non-significance of age and financial literacy in this context is that the ages of students in senior high school belong to the same age bracket. Age could be a significant factor if respondents do not belong similar age bracket. For instance, a comparison between junior high school and senior high school. Hence, it is recommended that respondents who belong to different age brackets be considered.

Gender and Financial Literacy got a .481 significance value, which is more than the 0.05 significance level, which resulted in accepting the null hypothesis. This means that gender does not have any significant relationship to a person's literacy on finances. This further means that no gender is superior in developing financial literacy. This is the exact opposite of the study of Margaretha and Pambudhi (2015) as cited in Herliani et al. (2018) which revealed that gender is one of the factors influencing financial literacy. Chen and Volpe (1998) as cited in Herliani et al. (2018), also concluded that men had stronger financial literacy than women, while Krishna et al. (2010) as cited in Herliani et al. (2018) discovered that women comprehend financial literacy better than men. These cited studies confirmed that gender is a factor in determining persons' financial literacy which is the exact opposite of this recent study.

This finding implies that Gender may or may not be a determinant to financial literacy. However, in the context of the respondents, gender is not a factor. Hence, this suggest to the teachers or policy makers and curriculum developers of the secondary education that there should be no subjective gender treatment in terms of acquiring and or developing financial literacy in schools.

Grade level and Financial Literacy got a .004 significance value, which is less than 0.05, which resulted in rejecting the null hypothesis. This means that grade level has a significant relationship to a person's literacy on finances. This further means that grade level of a person affects his financial literacy. Presumably, the higher the grade level, the higher the financial literacy of a person is. This result is reflected in the study of Han (2022), which found that higher-level high school students showed a larger positive association between their objective and subjective levels of financial literacy than students in lower-level grades. Likewise, Murugesan, Manohar, Gandreti, and Sujatha (2023) revealed that educational level is moderately associated with financial literacy among women in Vizianagaram District. Silva, Magro, Gorla, and Nakamura (2017) also found that students in the upper grades had higher levels of financial literacy than those in the lower grades.

This finding implies that financial literacy should be introduced to high school students based on their grade levels. The level of difficulty in financial literacy subjects should also be reflective of the grade levels of the students. Hence, curriculum developers may consider this finding in designing financial literacy subjects per grade level.

Family Monthly Income and Financial Literacy got a .000 significance value, which is less than 0.05, which resulted in rejecting the null hypothesis. This means that family monthly income has a significant relationship to a person's literacy on finances. This further means that family monthly income of a person affects his financial literacy. A person whose family's monthly income is higher would probably have higher financial literacy. This result is similar to Nidar and Bestari (2012) when they revealed that income from parents has a significant influence on the level of financial literacy among West Java pupils. This is likewise reflected in Keown (2011) when it is revealed in his study that better-income parents have higher levels of financial literacy because they use financial instruments and services more frequently.

This result implies that the development of financial education among students is not only a solo endeavor among the schools and the teachers, but also and most importantly, is a collaborative effort that include the parents. Hence, parents as the first teachers of the students should also be financially literate for the students to be influenced by them. Parents, their income and how financially literate they are plays is of vital importance.

Full-time Students and Financial Literacy got a .860 significance value, which is more than the 0.05 significance level, which resulted in accepting the null hypothesis. This means that being a full-time student does not have any significant relationship to a person's literacy on finances. This further means that no matter how much time a student spends on being a student, it does not influence his financial literacy especially when the school does not expose him to financial concepts. No existing studies have found support or refute this finding since this aspect of the demographic profile was not found to be included as part of the demographic profile.

This implies that the quantity of time being spent by students in school may be full-time or part-time is not a determinant of financial literacy. However, if students are given opportunities or avenues to develop financial literacy, they will apparently acquire the literacy that is expected from them. Hence, financial related subjects be offered in school in order to determine if their status (full-time/part time) affects their financial literacy.

Working Student and Financial Literacy got a .180 significance value, which is more than the 0.05 significance level, which resulted in accepting the null hypothesis. This means that being a working student does not have any significant relationship to a person's literacy on finances. This further means that earning money from work does not guarantee financial literacy of workers unless the work is relevant to managing finances. This result is not reflected in the study by Bohm, Bohmova, Gazdikova, and Simkova (2023), as they revealed that students' work experience was one of the most crucial factors determining financial literacy. Ansong and Gyensare (2012) as cited in Herliani et al. (2018), also revealed that work is one of those characteristics that influenced financial literacy.

Hence, further studies should consider looking into the kind of work the students are affiliated in to provide clearer discussion on these varied results in terms of work experience influencing financial literacy.

Table 5

Relationship between respondents' demographic profile and entrepreneurial behavior

Null Hypothesis	Test	Significance	Decision
The distribution of entrepreneurial behavior is the same across categories of age	Independent Samples Kruskal Wallis Test	.454	Accept
The distribution of entrepreneurial behavior is the same across categories of gender	Independent Samples Kruskal Wallis Test	.251	Accept
The distribution of entrepreneurial behavior is the same across categories of grade level	Independent Samples Kruskal Wallis Test	.601	Accept
The distribution of entrepreneurial behavior is the same across categories of grade level	Independent Samples Kruskal Wallis Test	.373	Accept
The distribution of entrepreneurial behavior is the same across categories of full-time student	Independent Samples Kruskal Wallis Test	.122	Accept
The distribution of entrepreneurial behavior is the same across categories of working student	Independent Samples Kruskal Wallis Test	.079	Accept

The significance level is at .05

It can be observed in the table that all aspects of the respondents' demographic profile obtained a significance value of more than 0.05 significance level which resulted in accepting the null hypothesis. This means that none of the demographic profiles of the respondents is significantly related to their entrepreneurial behavior. This further suggests that respondents' age, gender, grade level, family income, full-time student, and working student do not directly affect nor influence the entrepreneurial behavior of a person. This is somehow similar to the study of Colichi, Gómez-UrrutiaI, Jimenez-FigueroaI, Carvalho Nunes, and Lima (2020) as they discovered that lack of education on entrepreneurship and lack of teaching of the subject are revealed to be the barriers of entrepreneurial behavior. Age, gender, grade level, and family income were not revealed as determinants of entrepreneurial behavior but were included in the study. Furthermore, in the study of Abdul Halim, Muda, Wan Mohd Amin, and Salleh (2012), age, gender, and level of education were found to not be significant determinants of entrepreneurial behavior, supporting the result of this study.

Hence, the demographic profile should not be the basis for the teaching and development of positive entrepreneurial behavior. Providing the students with opportunities by offering subjects pertaining to entrepreneurship should be given the focal point among curriculum developers of the basic education.

Table 6

Relationship between respondents' financial literacy and entrepreneurial behavior

		Sum of Squares	df	Mean Square	F	Sig.
Financial Knowledge	Between Groups	17.273	104	.166	1.054	.486
	Within Groups	2.364	15	.158		
	Total	19.637	119			
Financial Attitude	Between Groups	33.748	104	.325	3.188	.007
	Within Groups	1.527	15	.102		
	Total	35.275	119			
Financial Behavior	Between Groups	19.346	104	.186	1.457	.207
	Within Groups	1.915	15	.128		
	Total	21.262	119			

The significance level is at .05

It is shown that on the three (3) aspects of financial literacy, only financial attitude, when correlated to entrepreneurial behavior, obtained a significant value of less than the significance level of 0.05, while financial knowledge got .486 and financial behavior got .207, which is all more than the significance level.

This means that only respondents' financial attitude is significantly correlated to entrepreneurial behavior, while financial knowledge and financial behavior are not. This further means that is only respondents' financial attitude influences their financial behavior and not their financial knowledge and financial behavior. As observed, among the three aspects of financial literacy, only financial attitude obtained higher average weighted mean compared to the other two which is apparently the reason of this result.

Nevertheless, the non-significance of the relationship between financial knowledge in this study is opposite to most of the results of the existing studies. For instance, the study of Tran, Phung, Nguyen, and Nguyen (2023) found that financial knowledge has a significant role in entrepreneurial decisions, leading to a recommendation of designing appropriate policies to strengthen it. The study of Bilal et al. (2020) supports the positive correlation between financial attitude; however, it opposes the non-significance of the relationship between financial knowledge and entrepreneurial behavior. In their study, it was revealed that financial attitude and financial knowledge have a positive bearing on Entrepreneurial Intent.

According to Veciana et al. (2005) as cited in Bilal et al. (2020), attitudes regarding entrepreneurs, entrepreneurial activity, and its social functions all have a role in how college students choose their careers in business. Applying financial knowledge carefully can increase entrepreneurial creativity and put it to use in practical ways (Ward, 2004, as cited in Bilal et al., 2020). Oseifuah (2010) as cited in Tran et al. (2023), investigates the relationship between financial knowledge and entrepreneurial skills and finds that there is a correlation between levels of financial knowledge and entrepreneurial skills. Alshebami and Al Marri (2022) revealed how saving behavior and financial literacy impact entrepreneurial intention. These literatures support and contradict the results of this study.

Hence, the financial knowledge and financial behavior as indicators of financial literacy needs further improvement for them to become positive determinants of their entrepreneurial behavior. Thus, these two concepts need to be introduced and strengthened in the secondary level of basic education acknowledging their vital role not only on students financial and entrepreneurial decisions but also for the country's economy as a whole.

5. Conclusions & recommendations

Based on the findings of the study, it can be concluded that financial literacy as to financial attitude is a determinant of entrepreneurial behavior, presumably so as with financial knowledge and behavior if they were only fully developed. The low to average financial knowledge and behavior apparently caused its insignificant impact on entrepreneurial behavior. Moreover, the significant relationship between family monthly income and financial literacy heeds a continuous collaboration between schools and parents. Likewise, the significant relationship between grade level and financial literacy calls for a subject design or policy for each grade level. In totality, factors or determinants of both financial literacy and entrepreneurial behavior may vary among respondents; one major thing is constant: these two need to be given attention as they are proven important in the economic stability not only of an individual but also globally. It is recommended that parents and schools collaborate should be established in develop students' financial literacy and integrate financial literacy and entrepreneurial behavior extensively into the curriculum of secondary education.

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