The moderating effect of demographic profile on students' capacity and willingness to invest in the Philippine Stock Market

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Abstract

The Philippine Stock Exchange (PSE), established in 1927, is the major national financial exchange in the Philippines, providing a convenient market for trading all types of securities. Using a descriptive-correlational design, a validated researcher-made instrument, and 235 students from the Accounting Education Department, this study aimed to determine if the demographic profile in terms of sex, program, year level, and source of cash moderated the relationship between the capacity and willingness to invest in the Philippine stock market. This study reveals that respondents have moderate technical knowledge in accessing investing platforms, different trading patterns, investing without professional guidance, and starting investments in blue-chip companies. Respondents were moderately in agreement that they have enough money to meet the minimum investment requirement, as well as savings and other personal sources of income they can use to start investing. Thus, this study found that the technical knowledge, financial aspect, and risk tolerance of the respondents are still in the range of moderate, given that they are still studying, which results in them being reluctant to start investing, especially since having a basic background about the stock market or average learning is not enough to engage in the stock market totally. Moreover, there is a significant relationship between students' capacity and willingness to invest in the PSM. Thus, students have a moderate capacity to invest, while their desire to invest in the PSM is high. Therefore, schools may consider incorporating stock market investing, under the guidance of knowledgeable persons, into students' output-related tasks.

Keywords: accounting students, financial literacy, risk tolerance, stock market, Philippine stock exchange

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1. Introduction

The stock market is an essential component of the financial sector in promoting economic development because it provides market liquidity, enabling long-term projects with long-term payoffs to be implemented and thereby promoting a country's economic growth (Ho & Odhiambo, 2016). Its key functions and importance to the economic development of emerging sectors, such as the Philippines, cannot be overlooked. The Philippine Stock Exchange (PSE) is a major national financial exchange in the Philippines, established in 1927 with the primary goal of creating and sustaining a convenient and appropriate market for the purchase, sale, and trading of all types of securities and other instruments. According to Leverkuhn (2022), the Philippine Stock Exchange serves as an essential regional exchange and the primary exchange of its kind in the country. Balaba (2017) stated that the performance of the PSEi is argued to reflect the financial health of the Philippine economy. From an economic performance perspective, especially regarding its impact on economic growth, it could be argued that stock market performance mirrors the economy's outlook. Financial investment services are now more diverse than ever. As a result, there is a broader range of investment instruments available and more options for investors to invest their money. On the other hand, several key factors influence investors' investment behaviors and decision-making processes. Investor behavior changes in response to the information they receive. Significant factors and events can affect stock market returns (Al-Awadhi et al., 2020). In this regard, the present study explores the relationship of students' demographics to their capacity and willingness to invest in the Philippine stock market.

Many factors influence willingness to invest, such as family size, number of earning family members, family nature, life-cycle stage, investment experience, educational level, family income, occupation, lifestyle, and personality characteristics (Khanam, 2017). Past studies have shown that a person's decision to invest in the stock market depends on different factors (Elmassri et al., 2016; Shah et al., 2018). Furthermore, several studies have shown that financial literacy or capacity influences investment decisions (Kumari, 2020). A study by Lusardi & Mitchell (2017) found that financial literacy was positively associated with financial decision-making among males but not among females. There are links among gender, financial literacy, and financial decisions, but the nature of those links is unclear. Understanding the underlying relationship between capacity and willingness to invest in the stock market will provide more information for presenting trading opportunities to support economic development.

According to Simbre et al. (2019), a progressive development of the stock market will, in turn, strengthen the Philippine economy by creating new industries and jobs and fostering price stability, thereby benefiting the entire country. They also concluded that a light awareness is sufficient as a starting point since everything starts with a point. Financial literacy and awareness of investment areas are mostly, if not primarily, attained at school. Thus, studying students' demographic factors in relation to their investing capacity will contribute to a better understanding of their investment decisions and their impact on the progressive development of the stock market. The study of students' demographic factors in relation to investment decisions has implications for the financial development of the economy, fund managers, issuing companies, and markets. This study will help investors, organizations, financial institutions, and consultants understand and identify the effects of the main demographic factors that influence students' decisions to invest in different investment schemes and their decision-making processes.

Research Objectives - The main purpose of the study was to identify the capacity and willingness of Accounting Education Department students in Occidental Mindoro State College – Main Campus to invest in the Philippine stock market. Specifically, the objectives of the study were the following: (1) To determine the demographic profile of the Accounting Education Department Students in terms of sex, course, year level, and

source of cash; (2) To determine the capacity of the respondents to invest in terms of technical knowledge, financial aspects, and risk tolerance of the students; (3) To determine the extent of the willingness of the students to invest in the Philippine stock market; (4) To identify the significant relationship between capacity and willingness of students to invest in the Philippine stock market; (5) To determine if the demographic profile of Accounting Education Department students, such as sex, program, year level, and source of cash, moderated the relationship between the capacity and willingness to invest in the Philippine stock market.

Significance of the Study - This study aims to determine students' capacity and willingness to invest in the Philippine stock market, and its findings may benefit various groups. For students, it can help them assess their qualifications, financial capacity, and investment interests. For schools, it may serve as a tool to evaluate students' capacity and guide them in learning more about the stock market. Consultants can use the information to better advise their clients about starting investments, while financial institutions can gain a deeper understanding of the factors that influence investor capacity and willingness. Investors may also benefit by gaining more knowledge about investing in the Philippine stock market, and future researchers can use this study as a reference for related research. Overall, this study will provide knowledge and insight into students' capacity and willingness to try and invest in the Philippine stock market.

Scope and Delimitation of the Study - The general intent of this study was to determine the capacity and willingness of Accounting Education Department students to invest in the Philippine stock market, as moderated by their demographic profiles. The study also aimed to determine the profile of Accounting Education Department students in terms of sex, program, year level, and their source of funding. The researchers investigated students' capacity to invest in terms of technical knowledge (course curriculum, seminars/webinars, social media platforms, family, and peers), financial aspects, and risk tolerance, as well as the extent of their willingness to invest in the Philippine stock market. The study also investigated whether demographic variables moderated the relationship between capacity and willingness of students to invest in the Philippine stock market, as well as the significant relationship between capacity and willingness of students to invest. The study included 235 randomly selected students from 490 enrollees in the Accounting Education Department at the College of Business, Administration, and Management of Occidental Mindoro State College, Main Campus, San Jose, Occidental Mindoro. Other campuses of Occidental Mindoro State College that offer accounting courses were not included in the study. The study will be conducted during the first semester of the Academic Year 2022-2023.

2. Methodology

Research Design - The researchers employed the descriptive-correlational research design. Correlational research examines the statistical relationship between two or more variables to determine how one variable relates to the others. This study describes the variables and the correlational relationships among the main variables, namely the students' capacity and willingness to invest in the Philippine stock market. Moreover, moderation was also used to provide a better understanding of the direction and/or strength of the relationship between the two main variables when a moderator variable is considered (Hair et al., 2021). Using moderation analysis, researchers can determine whether demographic variables moderate the relationship between students' capacity and willingness to invest.

Respondents of the Study - The researchers considered the students from the Accounting Education Department of Occidental Mindoro State College – Main Campus. According to the Program Heads of the Accounting Education Department, the total enrollment for A.Y. 2022-2023 was 490. Based on the given ratio, the respondent was divided into twelve sections. A Raosoft calculator was used to get the number of respondents. From the total population of 490 students, the minimum sample size was 216. A slight change happened to the number of populations in this study. This is after the consultation with our data analyst, who suggested raising the target number of respondents to 240, if possible, to achieve a 10 percent response rate per question. However, only 235 responses were included after data collection because five responses had incomplete answers. The researchers used stratified random sampling to obtain a representative sample. Stratified random sampling is a type of

probability sampling that involves dividing the population into smaller groups—called "strata"—and randomly choosing members from various strata. Since the total population of the Accounting Education Department at OMSC-Main Campus is 490, stratified random sampling was used, as it involves dividing the population into smaller groups that share the same characteristics as the sample size and the respondents in the study.

Research Instrument - This study used a researcher-made questionnaire, which is based on a specific research topic and served as the research instrument in gathering data that was used for the study. The instrument was validated by three experts in research and business from Occidental Mindoro State College. The questionnaire was composed of two parts. The first part was used to determine the respondents' demographic profile. In contrast, the second part used a 5-point Likert scale to assess students' capacity and willingness to invest in the Philippine stock market. The respondents were instructed to respond to the degree of their agreement with the statement in the instrument. After validating the questionnaire by three experts, the reliability analysis was conducted. The participants in this analysis are 15 BSA students, three males and 12 females. The technical knowledge parameter consists of 7 questions and yielded a score of 0.715. One indicator of technical knowledge was removed to achieve a higher value, resulting in a score of 0.753. The parameters, financial aspect, and risk tolerance still have the same seven questions, as they yielded high values (0.909 and 0.885, respectively). For the willingness, the five questions yielded a Cronbach's alpha of 0.820. Overall, only the technical knowledge one was removed, and all the remaining indicators are acceptable.

Data Gathering Procedure - The researchers used a questionnaire as an instrument, and it was distributed through an online platform, which is Google Forms, and a face-to-face survey. Before conducting the survey, the instrument was put through a reliability test. After passing the test and securing a permit to conduct the survey, the researchers asked the randomly selected respondents for their time and effort in completing the instrument. The collected data were categorized, analyzed, and interpreted to determine whether students' demographic profiles moderate the relationship between capacity and willingness to invest in the Philippine stock market.

Statistical Treatment of the Data - To analyze the data, Microsoft Excel was used to encode it. Frequency and percentage distributions were used to present the demographic profile of the respondents, while mean and standard deviation were used to describe the respondents' capacity and willingness to invest. Moreover, IBM SPSS version 23 was utilized to examine the relationship between capacity and willingness to invest. Lastly, a path analysis in IBM AMOS version 23 was used to test whether the demographic variables moderated the relationship between capacity and willingness to invest.

Ethical Considerations - The researchers strictly adhere to the ethical considerations and Republic Act 10173, or the Data Privacy Act of 2012, in conducting this research. Informed consent was obtained from all participants, and the researchers explained well the contents of the study, the risks in gathering the data, and the purpose of conducting the research. The name and other personal information obtained from the participants are kept confidential and processed solely for academic purposes. The research findings were presented in accordance with established ethical research standards.

3. Results and Discussions

The demographic profile of the respondents, by sex, course, year level, and source of cash, for Accounting Education Department students at Occidental Mindoro State College – Main Campus is shown in Table 1. The demographic profile of the respondents in terms of sex comprises 20.85 percent and 79.15 percent for male and female, respectively. As for the programs, BSA has the smallest percentage response of 20.85 percent, given that it has the smallest population in the department; BSMA has 25.96 percent, and BSAIS, which has the largest population in the department, comprises 53.19 percent because the required percentage rate in BSA is higher than the non-BSA programs. According to the study by Zacharai (2019), most students enrolled in accounting courses are female. The first-year and second-year respondents have 47.66 percent, while the third- and fourth-year respondents have 52.34 percent. The population of respondents in the first and second years is smaller than that of

the third and fourth years because of the limited enrollment in the academic year 2022-2023. According to the study, 77.45 percent of respondents have a single source of cash, while 22.55 percent have multiple sources.

Table 1

Demographic Profile of the respondents (n=235)

Demographic Profile		Frequency (f)	Percentage (%)
Sex	Male	49	20.85
	Female	186	79.15
	Total	235	100.00
Program	BSA	49	20.85
	BSAIS	125	53.19
	BSMA	61	25.96
	Total	235	100.00
Year level	1st year & 2nd year	112	47.66
	3rd & 4th year	123	52.34
	Total	235	100.00
Source of Cash	Single Source	182	77.45
	Multiple Sources	53	22.55
	Total	235	100.00

The three (3) sub-variables of students' investing capacity in the PSM were presented in Table 2 to present the results from the gathered data clearly. Data show the extent of students' investment capacity in terms of technical knowledge, financial aspects, and risk tolerance in relation to the Philippine stock market. This part of the survey yielded only moderate to high values on the 5-point Likert Scale used. Four indicators of technical knowledge (indicator 1, indicator 3, indicator 5, and indicator 6) yielded a mean range of 2.79 to 3.43 and an SD range of 0.88 to 1.10, interpreted as moderate. This implies that the respondents have moderate technical knowledge in accessing investing platforms, different trading patterns, investing without professional guidance, and starting investments in blue-chip companies. Consequently, indicators 2 and 4 of technical knowledge were interpreted as high on the Likert Scale used. This suggests that the respondents have strong technical know-how for identifying legitimate platforms to avoid scams, as evidenced by their use of online resources such as YouTube and Google. Likewise, Bollampelly (2016) emphasizes that social media and websites are, in fact, providing investors with more current financial news and information, thereby rationalizing their willingness to invest. However, indicator 5 has the lowest mean, indicating that most students still prefer to seek guidance from investment professionals when making investment decisions.

Generally, Table 2 shows that the overall mean for technical knowledge is 3.41, and the SD is 0.69. This result implies that students' technical knowledge is moderate, indicating that the respondents have a basic understanding of the stock market as a result of their business and accounting-related program. Hasanah & Kurnia (2019) claim that knowledge of the investment is expected to help investors determine the extent of their investment. Interestingly, all the indicators of the financial aspect had mean scores ranging from 2.51 to 3.50 and SDs ranging from 1.01 to 1.18, all interpreted as moderate. This implies that the respondents have a moderate investing capacity in the PSM in terms of their Financial Aspect. Indicator 4 has the lowest mean, suggesting that most students lack other sources to start investing. However, given that indicator 5 has the highest mean, respondents agree that cutting a portion or any excess of their school allowance is one of the ways to begin investing. To explain further, the respondents moderately agree that they have enough money to meet the minimum investment requirement, as well as savings and other personal sources of income they can use to start investing. As a result, the extent of students' investing capacity in the financial aspect had an overall mean of 2.96 and was also interpreted as moderate. This means their financial capacity to invest is limited, given their current status as students. Loke et al. (2015) stated that financial capacity covers both the financial literacy and external opportunity components through financial inclusion. Thus, financial capacity comprises knowledge development and access to financial services.

Table 2

Extent of students' capacity in the Philippine stock market in terms of technical knowledge, financial aspects, and risk tolerance.

Indicators (Technical Knowledge)	Mean	SD	Interpretation
1. I know how to access investing applications/websites (e.g., Investa, Binance, etc.)	3.33	1.09	Moderate
2. I know how to distinguish legitimate platforms to avoid investment scams and other fraudulent investment activities.	3.84	0.89	High
3. I can identify trading opportunities in price trends and patterns seen on charts.	3.43	0.88	Moderate
4. I read, watch, and search for information about investing to gain knowledge (e.g., Google, YouTube).	4.08	0.91	High
5. I can begin investing without the help of an investing coach, broker, financial advisor, etc.	2.79	1.10	Moderate
6. I have targeted blue chips stock companies to begin investing in (Coca-Cola, McDonald's, Jollibee, etc.)	3.00	1.02	Moderate
Composite Mean	3.41	0.69	Moderate
Indicators (Financial Aspects)			
1. I have enough money to meet the minimum investment requirement.	2.77	1.01	Moderate
2. I have savings that I can use to start with the investment.	2.88	1.06	Moderate
3. I can get a portion of my school allowance in order to meet the minimum investment requirement.	3.15	1.01	Moderate
4. I have a personal source of income that I can use to start investing (e.g., Online selling, part-time job, etc.)	2.66	1.18	Moderate
5. I can use the excess allowance that my parents/guardians give to begin investing.	3.43	1.00	Moderate
6. I can use a portion of my scholarship grant for investing.	2.98	1.17	Moderate
7. My parents can provide me with money to use for investing.	2.83	1.10	Moderate
Composite Mean	2.96	0.75	Moderate
Indicators (Risk Tolerance)			
1. I can handle any degree of risk associated with investing.	3.16	1.00	Moderate
2. I can handle fraud or scam risk.	3.27	0.97	Moderate
3. I can tolerate unexpected stock price changes.	3.11	0.95	Moderate
4. I can handle the greater risk associated with investments with higher returns.	3.17	0.98	Moderate
5. I can handle risks associated with highly volatile stocks.	3.03	0.97	Moderate
6. I prefer low-risk investments with low returns.	3.13	0.98	Moderate
7. I can resort to borrowing in order to start investing	2.87	1.08	Moderate
Composite Mean	3.10	0.75	Moderate
OVERALL MEAN	3.16	Moderate	

The results on the extent of students' investing capacity in the Philippine stock market, in terms of risk tolerance, have an overall mean of 3.10 and are interpreted as moderate. There are seven indicators for this sub-variable, all with mean scores ranging from 2.51 to 3.50 and interpreted as moderate. To explain in detail, the respondents' risk tolerance is relatively moderate, indicating they can manage investment risks, handle scam threats, tolerate price fluctuations, and prefer low-risk investments. Indicator 2 has the highest mean, indicating that respondents have some basic knowledge of fraud or scams, which helps them identify whether it is safe or not. This also implies that the respondents have a moderate to high risk tolerance, as the students' responses indicate they can handle fraud or scams. Risk tolerance is influenced by financial literacy: students with less financial knowledge tend to be risk-averse (Bajo et al., 2015), a finding supported by Mishra (2018). Indicator 6 has the lowest mean for risk tolerance, indicating that students are least likely to borrow money to start investing. According to Lusardi (2019), effective and influential learning helps students understand, assess, and act in their own financial interests. Since students still lack sufficient knowledge about investing and have limited sources, they are more hesitant and not entirely confident in investing, as well as in the risk of not being able to repay the borrowed money. As shown by the general result of this sub-variable, the respondents in this study have a moderate risk tolerance for investing in the PSM, given their current status as students.

The extent of investing capacity of the students in the Philippine stock market comprises a grand mean of 3.16, and interpreted as moderate. This means that the technical knowledge, financial aspect, and risk tolerance of the respondents are still in the range of moderate, given that they are still studying, which results in them being reluctant to start investing, especially since having a basic background about the stock market or average learning is not enough to engage in the stock market totally. Before engaging in the stock market, investors need adequate

knowledge, and this is supported by the study of Hidayat et al. (2020).

Table 3

The extent of students' willingness to invest in the Philippine stock market.

Indicators	Mean	SD	Interpretation
1. I am willing to invest in the Philippine Stock Market (PSM) given my current financial capacity.	3.37	1.02	Moderate
2. If I had enough money now, I would start investing in the Philippine Stock Market (PSM).	3.69	0.97	High
3. I am willing to take a risk investing in the Philippine Stock Market, though there is a chance of losing my money.	3.46	0.94	Moderate
4. I am very eager to explore investing.	3.87	0.96	High
5. Investing in the Philippine Stock Market (PSM) is another way of gaining financial freedom.	3.77	0.88	High
COMPOSITE MEAN	3.63	0.77	High

Table 3 shows the extent of students' willingness to invest in the PSM, with an overall mean score of 3.63 and an SD of 0.77, indicating a high level of willingness. Five indicators have been formulated for this variable. Apparently, indicators 1 (mean = 3.37, SD = 1.02) and 3 (mean = 3.46, SD = 0.94) are interpreted as moderate. This means that the extent of the willingness of respondents is moderate, given their current financial capacity as well as their willingness to take the risk associated with investing. Meanwhile, indicators 2 (mean 3.69, SD 0.97), 4 (mean 3.87), and 5 are among the highest individual mean scores and are interpreted as high. This means that respondents' willingness to invest is high and that they view PSM as a means to achieve financial freedom. Indicator 1 has the lowest mean for students' willingness to invest, given their current financial capacity. The higher the students' financial capability, the greater their interest in the stock market (Herawati & Dewi, 2020). Meanwhile, indicator 4 has the highest mean value among the five indicators of willingness. This shows that students are interested and eager to explore the stock market while still studying, as Thapa (2018) also supports. Study. In general, the extent of willingness to invest in Accounting Education students is excellent (Gi, 2018). self-assessed capacity. This was supported by the study of Ahinful et al. (2021). Attitudes towards money, financial risk, and financial literacy are factors that influence students' willingness to invest in the Philippine stock market.

Table 4

Correlation between capacity to invest and willingness to invest

Capacity to Invest	Willingness to Invest			
	N	r	p-value	Interpretation
Technical Knowledge	235	0.311	<0.001	Highly Significant
Financial Aspects	235	0.428	<0.001	Highly Significant
Risk Tolerance	235	0.542	<0.001	Highly Significant

The results of the correlation analysis, performed to determine which sub-variables of capacity to invest are significantly correlated with willingness to invest in the stock market, are presented in Table 4. As shown in the table, all three sub-variables of capacity to invest, which are technical knowledge (r= 0.311, p<0.001), financial aspects (r= 0.428, p<0.001), and risk tolerance (r= 0.542, p<0.001), are highly significantly related to willingness to invest. Moreover, the positive correlation indicates that as students' capacity increases, their willingness to invest in the PSM also rises, supporting previous studies' findings. These findings are supported by Jariwala (2015), who emphasizes that knowledge plays a crucial role in investment decisions and that financial literacy significantly influences them. Those with low literacy show a much less keen interest in investing in stocks. Likewise, Thapa's (2018) study also demonstrates the significance of stock market education for undergraduate students. Lack of knowledge hinders students' interest and willingness to participate in the stock market. As for Financial Capacity, previous research (Junaeni, 2020) found that income affects investment decisions. People with high incomes are likely to invest, while those with just enough to cover day-to-day expenses are unlikely to invest. Meanwhile, the study by Ahinful et al. (2021) shows that students' financial risk attitudes and willingness to invest in stock markets are significantly related. This suggests that students with a low risk tolerance are less willing to invest.

Table 5 presents the results of a multi-group path analysis to determine whether the demographic profile of the respondents moderates the relationship between the three sub-variables of capacity to invest and willingness to invest in the stock market. In terms of sex, as shown in the table comparing technical knowledge and willingness, the positive relationship was found to be significant only for females and not for males. This means that technically knowledgeable females are more willing to invest in the PSM than males. Lusardi & Mitchell (2017) claim that women are financially illiterate compared to men, resulting in a gender gap in financial literacy. However, explaining the differences between men and women is difficult, as Bucher-Koenen et al. (2016) note.

Table 5

The moderating effect of demographic profile on the relationship between capacity and willingness to invest in the stock market

SEX					
Path Name	Male	Female	Difference in Betas	P-Value for Difference	Interpretation
Technical Knowledge → Willingness	0.123	0.362*	-0.239	0.175	Not Significant
Financial Aspects → Willingness	0.513*	0.409*	0.104	0.176	Not Significant
Risk Tolerance → Willingness	0.579*	0.534*	0.046	<0.001	Highly Significant
PROGRAM					
Path Name	BSA	Non-BSA	Difference in Betas	P-Value for Difference	Interpretation
Technical Knowledge → Willingness	0.322	0.349*	-0.027	<0.001	Highly Significant
Financial Aspects → Willingness	0.317	0.454*	-0.137	0.293	Not Significant
Risk Tolerance → Willingness	0.329	0.593*	-0.264	0.080	Not Significant
YEAR LEVEL					
Path Name	1st & 2nd Year	3rd & 4th Year	Difference in Betas	P-Value for Difference	*Interpretation*
Technical Knowledge → Willingness	0.237	0.304*	-0.066	<0.001	Highly Significant
Financial Aspects → Willingness	0.457*	0.328*	0.129	<0.001	Highly Significant
Risk Tolerance → Willingness	0.566*	0.422*	0.144	0.229	Not Significant
SOURCE OF CASH					
Path Name	Single Source	Multiple Sources	Difference in Betas	P-Value for Difference	
Technical Knowledge → Willingness	0.296*	0.300	-0.004	<0.001	Highly Significant
Financial Aspects → Willingness	0.439*	0.322	0.117	<0.001	Highly Significant
Risk Tolerance → Willingness	0.523*	0.569*	-0.046	<0.001	Highly Significant

Meanwhile, between financial aspects and willingness to invest, it was found that there is no significant difference in the positive relationship between financial aspects and willingness to invest between males and females. This is in contrast to the results presented by Lusardi & Mitchell (2017), who found that males' higher financial literacy makes them more likely to invest than women, regardless of income. Furthermore, between risk tolerance and willingness to invest, the positive relationship between risk tolerance and willingness to invest is stronger for males. Bannier & Neubert (2016) claim that females are less risk-tolerant than males, as they are reluctant to invest in higher-risk assets and prefer low-risk investments.

Table 5 also presents the results of a multi-group path analysis to determine whether the program moderates the positive relationship between the three sub-variables of capacity to invest and willingness to invest in the stock market. As shown in the table, the positive relationship between technical knowledge and willingness was significant only for non-BSA. This significant positive relationship means that the higher the technical know-how of Non-BSA students, the more likely they are to invest in the PSM. However, that is not the case for BSA students. Differences in the curriculum and specialization in accounting subjects between BSA and non-BSA students affect their investment in technical knowledge. According to the study by Dong et al. (2022), students enrolled in business

education have a higher participation rate. However, students who like subjects such as accounting and finance have a higher participation rate than other students, even though the curriculum was the same. Meanwhile, between financial aspects and willingness to invest, it was found that there is no significant difference in the positive relationship between financial aspects and willingness to invest between BSA and non-BSA.

Furthermore, between risk tolerance and willingness to invest, the positive relationship between risk tolerance and willingness to invest is also stronger for non-BSA. This means that the higher the non-BSA's investing capacity in terms of risk tolerance, the more likely they are to invest in the PSM, even though both BSA and non-BSA show a positive relationship between risk tolerance and willingness to invest. Similarly, Yong & Tan (2017) found that financial literacy level had significant effects on the financial behavior and investment willingness of business faculty students.

To determine the results of a multi-group analysis through path analysis, if year levels moderate the positive relationship between the three sub-variables of capacity to invest and willingness to invest in the Philippine stock market, Table 5 also presents the results. As shown in the table, the positive relationship between technical knowledge and willingness to invest was significant only for the third and fourth years, not for the first and second years. Baihaqqy et al. (2020) found that the higher a person's education level, the greater their financial literacy. The different levels of education investors have can affect their level of understanding of financial literacy. However, between financial aspects and willingness to invest, the positive relationship was significant only for the first and second years, not for the third and fourth years. Meanwhile, it was found that there is no significant difference in the positive relationship between risk tolerance and willingness to invest between the first and second years and between the third and fourth years. The results of the source of cash, if it moderates the positive relationship between the three sub-variables of capacity to invest and willingness to invest in the Philippine stock market, using multi-group analysis through path analysis, are presented. As shown in the table, between technical knowledge and willingness to invest, the positive relationship was found to be significant only for multiple sources and not for a single source. However, between financial aspects and willingness to invest, the positive relationship was found to be significant only for a single source and not for multiple sources. Meanwhile, it was found that the positive relationship between risk tolerance and willingness to invest was significant for multiple sources only and not for a single source. High-income people tend to invest and have a higher risk tolerance than those who have low income (Dickason-Koekemoer & Ferreira, 2019). In college, or in business or finance courses, students have a much more positive attitude towards financial risk-taking, resulting in a higher risk tolerance.

4. Conclusions and Recommendations

Based on the research findings, the following conclusions were drawn: The majority of respondents from the Accounting Education Department are females who come primarily from non-BSA programs and are in their third and fourth years. Most of them have a single source of cash, mainly coming from parents' support. Accounting Education Department students have a moderate capacity to invest in terms of technical knowledge, financial aspects, and risk tolerance. The extent of the Accounting Education Department students' willingness to invest in the PSM is excellent, given their current capacity. There is a significant relationship between all three sub-variables (technical knowledge, financial capacity, and risk tolerance) of capacity and willingness to invest in the PSM among Accounting Education Department students. Risk tolerance has the strongest relationship among the three. Sex, program, year level, and source of cash moderate the capacity (but vary across its three sub-variables) and the willingness of Accounting Education Department students to invest in the Philippine stock market.

Based on the study's results, findings, and conclusions, the following was recommended: a single source of cash can be achieved if students do not have to spend their whole day at school teaching minor subjects that are not directly related to the field they are trying to learn. The researchers therefore suggest to the Commission on Higher Education (CHED) that it consider reducing the number of minor subjects taken by Accounting Education students to make way for seeking another possible source of cash, i.e., a part-time job, to meet the minimum investment requirement in the Philippine stock market. The Commission on Higher Education (CHED) may

consider increasing the number of subjects related to stock market investing to enhance students' capacity to invest in the PSM in terms of technical knowledge, while decreasing the number of minor subjects unrelated to the accounting profession. Schools may consider incorporating stock market investing, under the guidance of knowledgeable persons, into students' output-related tasks, similar to other simulation activities conducted during undergraduate studies, e.g., business simulation, opening a savings account, etc. Increasing students' risk tolerance will also increase their willingness. This can be done by increasing students' confidence in detecting and preventing fraud and scams related to stock investing. In this regard, schools may consider conducting seminars or webinars to briefly discuss how to handle scams and fraud in investing in the PSM. The programs under the Accounting Education Department (AED) differ only slightly in the subjects they cover, focusing on financial instruments and investing. Therefore, further studies and observations can be conducted, such as selecting programs outside the Accounting Education Department to test whether the program actually moderates students' capacity and willingness to invest in the PSM.

5. References

Ahinful, G. S., Otieku, J. K., Anokye, F. K., & Owusu, G. M. (2021). What influences the willingness of university students to invest in stocks? *International Journal of Education Economics and Development*, 12(2), 116. https://doi.org/10.1504/ijeed.2021.10035302

Al-Awadhi, A. M., Alsaifi, K., Al-Awadhi, A., & Alhammadi, S. (2020). Death and contagious infectious diseases: Impact of the COVID-19 virus on stock market returns. *Journal of Behavioral and Experimental Finance,* 27, 100326. https://doi.org/10.1016/j.jbef.2020.100326

Baihaqqy, M., Disman, N., & Maya. (2020). The correlation between education level and understanding of financial literacy and its effect on investment decisions in capital markets. *Journal of Education and e-Learning Research,* 7(3), 306–313. https://doi.org/10.20448/journal.509.2020.73.306.313

Bajo, E., Barbi, M., & Sandri, S. (2015). Financial Literacy, Households' Investment Behavior, and Risk Propensity. *Journal of Financial Management, Markets and Institutions*, 1(1), 154–174. https://doi.org/10.12831/80534

Balaba, J. (2017). Does the stock market drive the Philippine economy? https://www.dlsu.edu.ph/wp-content/uploads/pdf/conferences/research-congress-proceedings/2017/RVREBM/RVREBM-I-003.pdf

Bajo, E., Barbi, M., & Sandri, S. (2015). Financial Literacy, Households' Investment Behavior, and Risk Propensity. Journal of Financial Management, Markets and Institutions, 1(1), 154–174. https://doi.org/10.12831/80534

Bannier, C. E., & Neubert, M. (2016). Gender differences in financial risk taking: The role of Financial Literacy and Risk Tolerance. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2748589

Bollampelly, R. (2016). Understanding the role of social media in investor reactions. https://esource.dbs.ie/bitstream/handle/10788/3191/mba_bollampelly_n_2016.pdf?sequence=1&isAllowed=y

Bucher-Koenen, T., Lusardi, A., Alessie, R., & Van Rooij, M. (2016). How financially literate are women? An overview and new insights. *Journal of Consumer Affairs*, 51(2), 255-283. https://doi.org/10.1111/joca.12121

Dickason-Koekemoer, Z., & Ferreira, S. (2019). Risk tolerance: The influence of gender and life satisfaction. *Journal of Economics and Behavioral Studies*, 11(1), 66-72. https://doi.org/10.22610/jebs.v11i1(j).2749

Dong, T., Eugster, F., & Nilsson, H. (2022). Business school education, motivation, and young adults' stock market participation. *Journal of Accounting and Public Polic*y, 106958. https://doi.org/10.1016/j.jaccpubpol.2022.106958

Elmassri, M. M., Harris, E. P., & Carter, D. B. (2016). Accounting for strategic investment decision-making under extreme uncertainty. *The British Accounting Review*, 48(2), 151–168. https://doi.org/10.1016/j.Bar.2015.12.002

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Moderation analysis. In Classroom companion: business (pp. 155–172). https://doi.org/10.1007/978-3-030-80519-7_8

Hasanah, A., & Kurnia, R. M. (2019). Effect of investment knowledge, entrepreneurship, and brand familiarity of the mutual fund platform toward student investment interest. *Proceedings of the 1st International Conference on Applied Economics and Social Science (ICAESS 2019).* https://doi.org/10.2991/icaess-19.2019.24

Herawati, N. T., & Dewi, N. W. (2020). The effect of financial literacy, gender, and students' income on investment intention: The case of accounting students. P*roceedings of the 3rd International Conference on Innovative Research Across Disciplines (ICIRAD 2019).* https://doi.org/10.2991/assehr.k.200115.022

Hidayat, L., Muktiadji, N., & Supriadi, Y. (2020). The knowledge and students' interest in investing in the investment gallery. *Proceedings of the 2nd International Seminar on Business, Economics, Social Science, and Technology (ISBEST 2019).* https://doi.org/10.2991/aebmr.k.200522.029

Ho, S., & Odhiambo, M. (2016). Stock Market Development in the Philippines: The past and the present. https://www.researchgate.net/publication/313821709

Jariwala, H. V. (2015). Analysis of financial literacy level of retail individual investors of Gujarat state and its effect on investment decision. *Journal of Business & Finance Librarianship*, 20(1-2), 133-158. https://doi.org/10.1080/08963568.2015.977727

Junaeni, I. (2020). Analysis of factors that influence decision making invest in capital markets in Millennial Generations. *International Journal of Accounting & Finance in Asia Pacific,* 3(3), 11–24. https://doi.org/10.32535/ijafap.v3i3.866

Khanam, Z. (2017). The impact of demographic factors on the decisions of investors during dividend declaration: A study on the Dhaka Stock Exchange, Bangladesh. *IOSR Journal of Business and Management* (IOSR-JBM) 19: 1–7. https://doi.org/10.9790/487X-1908040107

Kumari, D. A. T. (2020). The impact of Financial Literacy on investment decisions: With special reference to undergraduates in Western Province, Sri Lanka. *Asian Journal of Contemporary Education. 4*(2), 110–126. https://doi.org/10.18488/journal.137.2020.42.110.126

Leverkuhn, A. (2022). What is the Philippine Stock Exchange? Smart Capital Mind. https://www.wise-geek.com/what-is-the-philippine-stock-exchange.htm

Loke, V., Choi, L., & Libby, M. (2015). Increasing youth financial capability: An evaluation of the MyPath savings initiative. *Journal of Consumer Affairs,* 49(1), 97–126. https://doi.org/10.1111/joca.12066

Lusardi, A. (2019). Financial Literacy and the need for financial education: Evidence and implications. Swiss *Journal of Economics and Statistics.* 155(1). https://doi.org/10.1186/s41937-019-0027-5

Lusardi, A., & Mitchell, O. S. (2017). Financial literacy and retirement preparedness: Evidence and implications for financial education programs. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.957796

Mishra, R. (2018). Financial literacy, risk tolerance, and stock market participation*. Asian Economic and Financial Review,* 8(12), 1457–1471. https://doi.org/10.18488/journal.aefr.2018.812.1457.1471

Shah, S. Z. A., Ahmad, M., & Mahmood, F. (2018). Heuristic biases in investment decision-making and perceived market efficiency: A survey at the Pakistan Stock Exchange. Qualitative Research in Financial Markets, 10(1), 85–110. https://doi.org/10.1108/QRFM04-2017-0033

Simbre, R., & Barriga, R. (2019). Level of Awareness of Filipinos on Stock Market Investments in Relation to Economic Growth. https://www.national-u.edu.ph/wp-content/uploads/2019/08/7-JSTAR6-Simbre-Barriga.pdf

Thapa, B. (2018). The Importance of Basic Education about Stock Investment and Trading for Undergraduate Students. https://www.theseus.fi/bitstream/handle/10024/156568/Thapa_Bimal.pdf? sequence=1

Yong H. N. A., Tan K. L. (2017). The influence of financial literacy on risk tolerance. *International Journal of Business and Society,* 18(3), 469-484. https://doi.org/10.33736/ijbs.3139.2017