Analysis of Filipino Consumer Perception on Shopping Using Credit Cards in the Philippines: A Multi Regression Approach

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Abstract

A new payment method has emerged following the widespread use of credit cards. Online purchasing became popular during the pandemic; thus, online consumers had a high possibility of transacting with installment payments. This study aims to determine the factors affecting the purchase intent motivation of Filipino consumers using credit cards. Five hundred eighteen (518) respondents were analyzed through correlation analysis and multiple regression. Seven variables were found to be statistically significant variables through multiple regression such as Financial Literacy (p-value = 0.000), Customer Experience (p-value = 0.000), Media (p-value = 0.003), Perceived Behavioral Control (p-value = 0.000), Attitude toward the Behavior (p-value = 0.000), Social Norms (p-value = 0.000), and Competence (p-value = 0.000). The results of the study will be beneficial to cardholders, shopping establishments, financial institutions, and the Philippine government in developing regulations to strengthen the economic conditions of the Philippines.

Keywords
Credit cards, Multiple regression, Filipino consumers, and Purchase intent motivation.

1. Introduction
A credit card is issued by a bank service company to users as a machine of price, allowing the cardholder to shop for items and avail services by borrowing funds as a means of payment that the holder promises to pay (Surekha et al. 2022). However, credit cards only allow a specific credit limit. Whenever one uses credit card in a purchase, the available credit limit goes down by the amount paid. It means that the cardholders owe the company the amount they paid on the purchase. Users continuously repeat the process spending and repaying to the company. However, the extensive use of credit cards globally has increased the spending consumption of cardholders, which also increases the amount they spend on availing of goods and services (Khan & Haque, 2020). In the last quarter of 2022,

TransUnion has mentioned that credit card users reached a total of 166 million, up from the prior three years (Pokora 2023).

Credit cards grant cardholders the capacity to make cashless transactions during purchase, noting the pre-set credit limit of the holders' credit accounts (Surekha et al. 2022). Its low-interest rate, better security features, and high acceptability allow individuals to have more purchasing options (e.g., online or physically). Following the emergence of credit cards, a new payment method has spread widely with the pandemic (Browne 2021). Today, many shoppers favor the installment payment method when purchasing online (Lake 2023). In 2022, it was estimated that the installment payment market had grown 2,400% compared to the year 2019 (Statista 2023). Due to its population, there has been a drop in the number of credit card users. Operlee (2023) stated that by year 2025, it is expected to have an increase in credit card usage by bank customers if cards offered installment payment methods. The addition of installment credit card payment promotions affects consumers' purchasing behavior, increasing their likelihood of arriving quickly with purchasing decisions (Ashby 2021).

The Philippines gradually adapts to changes with a growing acceptance of different credit card options globally. Royandoyan (2022) projected that credit card installment users could strike from 5.2 million last 2021 to 17.6 million by year 2026. With all these, the increased use of installment services among consumers has caused a shrink in the use of credit cards. In summary, 61% of Filipino consumers choose installment payment options for purchases, and only 14% choose credit cards in their transactions (BusinessWorld 2022).

Studies have been done to determine the different factors affecting consumers' purchase behavior with the use of either installment or credit cards. Khan and Haque (2020) aimed to explore the variables influencing Bangladeshi consumers to make transactions using the installment mechanism through a two-stage sampling technique. Gu and Wu (2019) also tested the online purchasing intention of students through interviewer-administered questionnaires and incorporated the Theory of Planned Behavior (TPB). On the other hand, Schomburgk and Hoffmann (2023) examined how autonomy reduces consumers' usage of credit card payment methods and how it affects the totality of their well-being. Finally, Relja et al. (2023) studied relatedness in determining the causal factors of installment payments in the United Kingdom and the efficacy of this payment method. Since the use of credit cards with installment payment methods in the Philippines is still emerging, present studies solely focused on the use and effects of credit cards in numerous transactions.

1.1 Objectives
With the increase in credit card usage over the years, this study aims to identify and evaluate the statistically significant factors affecting the perceived behavior of Filipinos to purchase using credit cards through multiple regression, integrating theories such as the Theory of Planned Behavior (TPB) and the Self-determination Theory (SDT). Additionally, the study seeks to suggest the use of the findings and knowledge obtained from the study as a means of learning and understanding the significant changes the credit card payment scheme has on consumers' buying behavior to help consumers, sellers, and financial institutions gain insights into the possible risks and gains they may obtain as the continuous preference of using credit cards as a payment option progresses.

2. Literature Review
2.1. History
Wrenn (2022) stated that the history of credit cards can be dated back as early as the 1700s. In 1800s, small merchants and consumers adopted the idea of exchanging goods, "credit coins and papers,". In 1914, Western Union launched metal plates called "Metal Money" that allowed customers to delay payment for some time. In 1950, Frank McNamara created Diners Club, a multipurpose charge card used for travel and entertainment availed by people who want to pay in a later time. In 1991, American Express launched a "Membership Rewards" program, becoming the world's most extensive card-based reward program in 2001. Meanwhile, Bank of America made BankAmericard, now called Visa, the country's first credit card that allowed revolving debt. As the credit card industry grew, Mastercard, was also formed.

As the operations of the credit card system became widely accessible in the United States, the Philippines also was able to establish its first-owned credit card of Filipinos in 1982 (eCompareMo 2018). A Philippine Commercial Credit Card (PCCCI), known as Bankard Inc., started the first cashless payment transactions in the country through an affiliation with Equitable PCI Bank (Malaya 2022). The country recognized the relevance of credit cards in the

country's economic and financial growth through the ratifying Republic Act No. 10870 or the Philippine Credit Card Industry Regulation Law ("Credit Card Law"), executed as of 17 July 2016 (Beltran 2021).

2.2. Credit Card Usage Trends
According to Resendiz (2021), at least 86% of the respondents in a survey of the Federal Reserve in 2019 own at least one credit card. Cardholders use at least 25.3% of their credit card limits. Americans' total credit card balance in the first quarter of 2023 is $986 billion (Schulz 2023). In the Philippines, card payments are set to hit Php 2.8 trillion in 2025. In 2022, Php 1.3 trillion in card payments will be made through credit cards and Php 945.8 billion through debit cards (Simeon 2022). An 11% growth in credit card usage in 2022 compared to the previous year. The reason for the growing popularity of credit cards is the pandemic. At the start of the pandemic, credit cards accounted for 2.1% of the transactions in e-commerce and are forecasted to double at the end of 2024 in a Wordplay report. Credit card installment payment methods are expected to increase by $450 billion from 2021 to 2026 (de Best 2023). The number continues to grow as more people become aware of the offers of credit card companies (Agcaoili 2022).

2.3. Requirements in Applying for a Credit Card
An article by Isla (2023) listed the minimum requirements for first-time credit card holders in the Philippines. The minimum age requirement is at least 21 years old up to 65 to 70 years old, must be a Filipino citizen, and for foreigners, at least two years of living in the Philippines. Annual income must be at least Php 120,000 (or approximately over $2,000 USD) for a credit card. An individual must have an active contact number, physical address, and a valid Taxpayer Identification Number (TIN) or any government-issued identification card for the contact information. Lastly, an individual must have a stable job for at least a year, be self-employed, and run a profitable business for at least two years. Also, financial institutions require an accomplished application form for applicants. The basic requirements are valid IDs, active mobile numbers, proof of income, DTI/SEC registration for self-employed, Alien Certificate of Registration for foreign applicants, and the application form.

2.4 Increased Perceived Consumer Spending Behavior
In the study of Khan & Haque (2020), it was found that 94.20% were satisfied with credit card because of its usefulness and benefits, while 5.80% were not satisfied due to security. This study supports the findings of Khan & Haque (2020), wherein the reason for the satisfaction of customers is closely related to benefits, which is in terms of the extension of the maximum period of payment with 0% interest. Once a person perceives an action positively, the individuals develop a will to do a particular action (Sutisna and Handra 2022).

Boden et al. (2020) stated that since consumers intrinsically despise paying upfront when shopping, credit card services appeal to them emotionally since this type of payment scheme eases and removes the pain of spending a lump sum in one go. With this, using the payment scheme increases consumer spending behavior compared to other payment methods, such as debit and cash transactions. This leads to service abuse and overconsumption (Khan and Mbanyi 2022). Additionally, consumers tend to choose a more expensive item when using the installment payment scheme. These purchases are apparent in different sectors, such as accommodation, food, and health services (Ashby 2021).

With this, underlying effects occur, such as changes in an individual's lifestyle. Based on the study of Rompas et al. (2020), credit cards effectively change a college student's lifestyle because of their impulsiveness in buying because of various transaction benefits and discounts offered by the said payment method. In support of this, careless spending and unnecessary consumption were usually caused by excitement and social pressure.

2.5. Economic Opportunity
Besides the effects of the installment payment scheme on consumers, it can also influence the economy, specifically in e-commerce markets and other business establishments. In Southeast Asia, alternative payment methods, such as credit cards, have transpired because of the accelerated growth in e-commerce (Ho 2021). Ambarwati et al. (2021) mentioned that it could provide excellent opportunities for e-commerce business transactions, especially for those who have incorporated the installment payment scheme into their system, which benefits the e-commerce markets. Analysts from UnaFinancial mentioned that the said payment transaction is expected to rise to $843M in the year 2025, which comprises about 7% of all e-commerce markets in the Philippines from 3% in the year 2020 (Retail Asia 2021).

Ho (2021) mentioned that with the option of installment payment, there has been an increased conversion rate from abandoning potential purchases to purchasing a product. This is one problem and complaint of e-commerce merchants,

and installment options add value for retailers and provide solutions to one of the difficulties they encounter. Although this solution can be an opportunity for e-commerce markets, there is also an underlying risk for companies who offer and incorporate installment payment methods in their system, such as delinquencies getting out of hand (Long 2022). With this, it is essential for credit card companies who offer this option to thoroughly check the credit scores and standings of users who apply for credit cards.

2.6. Behavioral Theories

Integrated in this paper are two theories: The Theory of Planned Behavior and the Self-Determination Theory. The Theory of Planned Behavior is used to evaluate the motive, context, and action of an individual (Kurata et. al 2022). Moreover, it helps in predicting the behavioral intentions of humans toward an action (Ong et. al. 2022). The Self-Determination Theory is a theory of human motivation and personality. This indicates that humans can be self-determined if the requirements of autonomy, relatedness, and competence are satisfied (Lopez-Garrido 2023).

3. Methods

The paper utilized a quantitative research method using multiple linear regression to identify the correlation of variables with each other. Multiple linear regression is a statistical tool that predicts the relationship between one dependent variable and two or more independent variables (Hayes 2023). 518 respondents were gathered through the survey. The methodology of this study focused on causal research, which identifies the cause-and-effect relationship between variables (Villegas 2023). This paper utilized two behavioral theories, the Theory of Planned Behavior and Self Determination Theory, to identify the perceived behavior of Filipinos using a credit card installment payment scheme.

Additionally, the research aims to evaluate statistically significant variables influencing Filipino consumers' perceived shopping mentality effects with utilizing the installment payment scheme. Financial literacy, customer experience, and media were considered in this paper. The result of the study will benefit cardholders, shopping establishments, financial institutions, and the Philippine government in establishing responsible usage of credit cards, creating more programs for cardholders, and developing regulations to strengthen the economic conditions of the Philippines. This research allows every institution and individual to adapt and be resilient to the possibilities of financial advancements with credit card payments. Figure 1 shows the theoretical research framework adopted in this paper.
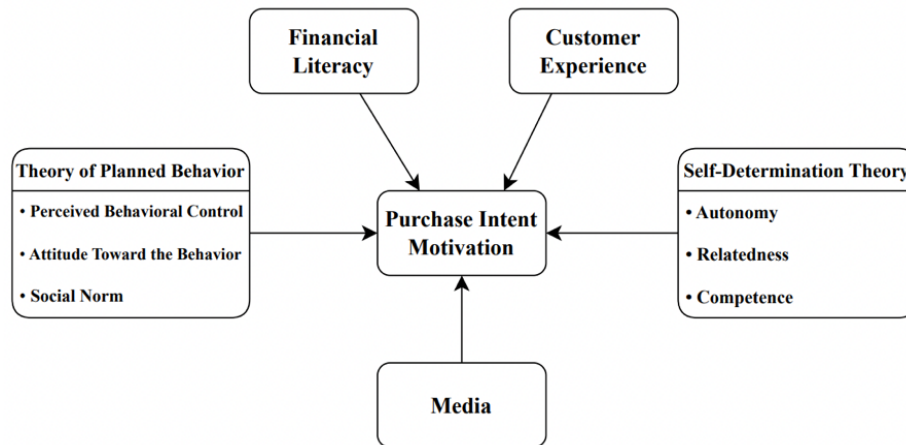

Figure 1. Theoretical research framework

4. Data Collection

The researchers conducted a self-administered survey questionnaire using Google Forms disseminated through social media platforms. In identifying the respondents, a convenience sampling method was used wherein participants were easily accessible and readily available to answer the survey. It was ensured that all respondents conformed to the requirements of the study. Moreover, participants also had the chance to decline the invitation to answer the survey.

Furthermore, data gathered was analyzed through multiple linear regression in Minitab to identify the correlation and significant variables and determine multicollinearity.

5. Ethical Considerations

The first and third principles of the Code of Ethics of Engineers from the Accreditation Board for Engineering and Technology (ABET) expressed that as Engineers, they should use and apply their knowledge and skills appropriately in ways that can benefit and impact the welfare of people as well as strengthen the competence and prestige of the engineering profession, served as the guiding principle for the researchers to conduct and complete this study with the incorporation of their knowledge and skills derived from their degree to assist their target community while ensuring the proper citation of related journals and articles for the study to acknowledge the works of original authors and maintain the integrity and dignity of the proponents and their study. Additionally, the researchers complied with the Republic Act 10173 (Data Privacy Act of 2012) of the Philippines as they performed the gathering of data, informing the participants of the purpose and extent of the study and their right to voluntarily participate or not to participate in the study and their right to withdraw (or stop answering) at any part of the process as they deemed necessary, and asked for their consent to use their provided information in the study. With the consent of participants, the researchers ensured the confidentiality of the gathered information or data from the self-administered survey to protect the participants' privacy.

6. Results and Discussion

6.1 Demographic Results

Table 1 shows five hundred eighteen (518) respondents were gathered to answer the self-administered questionnaire. The survey questionnaire was disseminated online. Researchers used the convenience sampling method, wherein participants were those who were easily accessible to the researchers (Nikolopoulou 2022). The respondents were also able to experience installment payment methods in credit card transactions.

Table 1. Descriptive Statistics of Participants

Characteristics	Category	Count	Percentage
Age	21-26	319	61.58%
	27-42	103	19.88%
	43-58	79	15.25%
	59-70	17	3.28%
Gender	Male	188	36.29%
	Female	315	60.81%
	Prefer not to say	15	2.90%
Residency	Provincial	217	41.89%
	Metropolitan	301	58.11%
Employment Status	Employee Full Time	183	35.33%
	Employee Part Time	16	3.09%
	Freelance / Contractor	12	2.32%
	Retired	8	1.54%
	Self-employed	38	7.34%
	Student	244	47.10%
	Unemployed	17	3.28%
Educational Attainment	Bachelor's Degree Holder	274	52.90%
	Diploma / Trade Certificate Graduate	40	7.72%
	Master's Degree Holder	15	2.90%
	Elementary Graduate	1	0.19%
	PhD / Doctorate Degree Holder	2	0.39%
	Secondary Graduate	186	35.91%
Have you tried using Credit Card Installment Payment Method?	Yes	518	100%
	No	0	0.00%

The survey resulted in most of the respondents, 61.58%, coming from the age group of 21 to 26. The least, with 3.28%, came from the age group of 59 to 70 years old. Female respondents comprised 60.81% of the population, while male respondents comprised 36.29%. The remaining 2.90% of respondents preferred not to disclose their gender. Based also on the survey, 58.11% of the participants live in metropolitan areas of the country, wherein establishments are much more accessible.

6.2 Correlation Analysis Results

Spearman correlation analysis was employed to analyze and measure the extent and direction to which variables have a relationship with one another, having a correlation coefficient ρ (rho) value ranging from -1 to 1, translating to a relationship from negligible to perfect linear relationship, either positive or negative (Ashok and Abirami 2018; Bunas et al. 2022; Akoglu 2018). Furthermore, Table 2 presents the statistical correlation between the independent variables (factors) and the Purchase Intent Motivation, the study's dependent variable.

Table 2. Minitab Results – Pairwise Spearman Correlations

Factors	Correlation Coefficient	Relationship
Financial Literacy	0.585	Moderate correlation
Customer Experience	0.873	Strong correlation
Media	0.768	Strong correlation
Perceived Behavioral Control	0.671	Moderate correlation
Attitude toward the Behavior	0.939	Strong correlation
Social Norms	0.826	Strong correlation
Autonomy	0.516	Moderate correlation
Relatedness	0.803	Strong correlation
Competence	0.624	Moderate correlation

With the outcome from Spearman correlation display in Table 2, the correlation coefficients were identified to assess the intensity of association between the factors and dependent variable, wherein all factors demonstrated a moderate to strong correlation with Purchase Intent Motivation. Five factors, including customer experience, media, attitude toward the behavior, social norms, and relatedness, are strongly associated with the intent to purchase. In contrast, financial literacy, perceived behavioral control, autonomy, and competence have a moderate relationship with the intention of Filipino consumers to purchase with installment payments. All the pairs of independent variables to the dependent variable have a p-value of 0.000, indicating all are significant relationships.

6.3 Multiple Regression Results

The researchers further processed the gathered data to identify and establish the statistically significant factors or variables affecting the purchase intent motivation and extract outlier values by integrating multiple regression analysis - stepwise selection as shown in Table 3.

Table 3. Minitab Results – Analysis of Variance

Source	DF	Seq SS	Contribution	Adj SS	Adj MS	F-Value	P-Value
Regression	7	74.5936	97.38%	74.5936	10.6562	1092.26	0.000
Financial Literacy	1	25.8179	33.70%	0.2626	0.2626	26.92	0.000
Customer Experience	1	32.4937	42.42%	0.9588	0.9588	98.28	0.000
Media	1	3.5820	4.68%	0.0868	0.0868	8.89	0.003

Perceived Behavioral Control	1	2.7161	3.55%	0.2739	0.2739	28.07	0.000
Attitude toward the Behavior	1	6.5169	8.51%	3.9690	3.9690	406.82	0.000
Social Norms	1	2.8442	3.71%	2.4987	2.4987	256.11	0.000
Competence	1	0.6227	0.81%	0.6227	0.6227	63.83	0.000
Error	206	2.0098	2.62%	2.0098	0.0098		
Lack-of-Fit	183	2.0098	2.62%	2.0098	0.0110		
Pure Error	23	0.0000	0.00%	0.0000	0.0000		
Total	213	76.6034	100.00%				

Moreover, for a factor to be statistically significant, the corresponding p-value of a factor must be less than 0.05 ($p < 0.05$) (Dahiru 2008). As seen in the results indicated in Table 3, the following factors, such as Financial Literacy (p-value = 0.000), Customer Experience (p-value = 0.000), Media (p-value = 0.003), Perceived Behavioral Control (p-value = 0.000), Social Norms (p-value = 0.000), Attitude toward the Behavior (p-value = 0.000), and Competence (p-value = 0.000), are the only variables that exhibited a p-value less than the 0.05 threshold. Thus, the stated seven factors were deemed statistically significant variables contributing to the perceived shopping mentality of Filipino consumers using credit cards.

Table 4. Minitab Results – Model Summary

S	R-sq	R-sq(adj)
0.0987732	97.38%	97.29%

Aside from the analysis of variance, the multiple regression test also provided the model summary as presented in Table 4, wherein the R-sq value or the model's goodness of fit is 97.38%, indicating that 97.38% of the variations occurring in the dependent variable, the purchase intent motivation, are explainable by the independent variables or predictors in the model. Additionally, the R-sq value decreases by 0.9%, as represented by the R-sq (adj), implying that the inclusion of another predictor that is not beneficial or has minimal significance in the model reduces the model fitness of the study (Kurata 2022).

6.4 Validation
From the resulting variance inflation factor (VIF), as shown in Table 5, the researchers determined the depth of multicollinearity in the study, given the correlation of predictors with one another. A value of more than 5.00 for the variance inflation factor (VIF) indicates multicollinearity, lowering the model's reliability (Bunas et al. 2022; Heckman 2015). Thus, with 4.98 as the highest variance inflation factor in the study, which does not exceed the VIF threshold, it implies that no multicollinearity is evident in the data used in the study.

Table 5. Minitab Results – Coefficients: Variance Inflation Factors

Source	Coef	SE Coef	95% Cl	T-Value	P-Value	VIF
Constant	-0.1002	0.0600	(-0.2185, 0.0181)	-1.67	0.096	
Financial Literacy	-0.0914	0.0176	(-0.1261, -0.0567)	-5.19	0.000	2.08
Customer Experience	0.2330	0.0235	(0.1867, 0.2794)	9.91	0.000	4.53
Media	-0.0524	0.0176	(-0.0870, -0.0177)	-2.98	0.003	2.91
Perceived Behavioral Control	0.0887	0.0167	(0.0557, 0.1217)	5.30	0.000	2.44

			(0.4556, 0.5543)	20.17	0.000	4.98
Attitude toward the Behavior	0.5050	0.0250				
Social Norms	0.2122	0.0133	(0.1861, 0.2384)	16.00	0.000	2.30
Competence	0.1300	0.0163	(0.0979, 0.1621)	7.99	0.000	2.24

6.5. Discussion

Installment payments have been introduced as a new payment method following the emergence of credit cards, which have been continuously spreading since the pandemic. With the growth of the said payment scheme, this study was conducted with an objective of understanding and determining the significant factors that influence the purchase intent motivation of Filipino consumers towards the use of credit cards.

Results show that all independent variables studied were deemed significant with the tests conducted. As seen in the correlation analysis, Attitude toward the Behavior exhibited the highest correlation coefficient, indicating a strong correlation with the Purchase Intent Motivation of the respondents. According to the study of Schomburgk and Hoffmann (2023), a more positive attitude toward the installment payment method results in a significant positive relationship with the use of the said payment method.

Besides this, Customer Experience, Media, Social Norms, and Relatedness also exhibited a strong correlation with Purchase Intent Motivation. Customer Experience significantly affects Purchase Intent Motivation in a way that a positive experience on credit card installment could certainly increase the customer's intent on using the payment method and vice versa. In support of this, Relja et al. (2023) have proven that convenience, a factor of Customer Experience, motivates consumers to pay with credit card installment. Relatedness, on the other hand, was deemed to motivate an action because of feeling a sense of belonging in an inclusive environment. Furthermore, the correlation of Media and Social Norms with Purchase Intent Motivation signifies the great importance of this variable in the study.

In addition to this, Financial Literacy, Perceived Behavioral Control, Autonomy, and Competence exhibit a moderate correlation with Purchase Intent Motivation. In the study of Gerrans et al. (2021), it was explained that highly financially literate individuals who perceived the installment payment scheme as less beneficial had reduced usage of the mentioned payment method. Moreover, individuals with high financial literacy have a higher risk perception regarding using credit card installment. Perceived Behavioral Control was also found to affect both intention and actual usage of credit card installment behavior. Lastly, Autonomy and Competence correlate with Purchase Intent Motivation because the higher the feeling of independence, as well as the number of skills and knowledge possessed by the consumer with regard to the installment payment scheme, the more they use and engage with this payment scheme.

Although results were desirable, the study is still in the discovery process in the country, which may require a more extensive amount of research in several areas. Moreover, various limitations of the paper were recognized. First, the platform used for data gathering was mainly social media, which caused a major problem in looking for individuals who qualified according to the criteria of the respondents. Second, the unequal distribution of participants from the four (4) generations occurred due to the lack of resources from different age group. Lastly, limited related research studies in the country were found since almost every study about the topic is from different countries.

7. Conclusion

The usage of credit cards has been emerging in recent years. According to Statista (2023), the credit card installment payment method usage in the Philippines for 2021 amounted to $0.1 billion; by 2026, it is expected to grow by $0.9 billion. This shows that there is a positive adaptation of this payment scheme. This study studied several variables, specifically nine variables, to determine what factors affect Filipino consumers' shopping mentality. These factors were Financial Literacy (FL), also known as financial knowledge or behavior, Customer Experience (CE) or customer satisfaction and fulfillment, Media (M), which pertains to various channels of communication, Attitude toward the Behavior (ATB), which are perspectives on behavior impacted by behavioral belief, Social Norms (SN) or subjective norms which is linked to a consumer's impression under social acceptability, Competence (C), also known as critical, intellectual, and skill-based abilities, Relatedness (R), described as the feeling of engaging in an inclusive

environment, Autonomy (A), pertaining to the ability of making decisions, and Purchase Intent-Motivation (PIM), which is a consumer's willingness and consideration to purchase a product or a service.

Two tests were done to find the relationship and significance level of the variables. Using the Pairwise Spearman Correlation, results show that variables have a moderate to strong correlation. Financial Literacy (FL), Perceived Behavioral Control (PBC), Autonomy (A), and Competence (C) demonstrated moderate correlations, while Customer Experience (CE), Media (M), Attitude toward the Behavior (ATB), Social Norms (SN), and Relatedness (R) signified strong correlations. On the second test, using Multiple Regression, seven out of nine (7 out of 9) variables namely Financial Literacy (FL), Customer Experience (CE), Media (M), Perceived Behavioral Control (PBC), Attitude toward the Behavior (ATB), Social Norms (SN), and Competence (C) are significant in the model while Autonomy (A) and Relatedness (R) were insignificant. The model fit resulted in 97.38% model fitness. This behavior can be demonstrated in the increasing forecast of credit card transactions, not only through credit cards but also through independent companies, in the coming years. Limitations were seen throughout the study. However, the results are deemed advantageous and beneficial for credit card holders, financial institutions, shopping establishments, and the government in promoting this type of payment scheme since the study would allow a better insight and understanding on the behavior of consumers in using the said payment scheme. Specifically, cardholders will be able to be more conscious, aware, and knowledgeable on responsible credit card usage. In the case of financial institutions and shopping establishments, the results of the study can be used to align their strategies and promotions with consumer demands and preferences, which allows the establishment to grow more in the economic aspect. Lastly, the Philippine government can benefit from the results, in a way that it could allow the improvement of laws and regulations in terms of the economic conditions of the country. Overall, the results of the study can contribute both theoretically and practically with the discovery of the integration of behavioral theories in achieving the maximum knowledge of the factors evaluated and the addition of literature and theoretical findings in the fields of business, marketing, and finance.

8. Practical Implications

First, credit card holders can acquire more knowledge and be more aware of the emerging installment payment scheme in credit cards. Moreover, this could help them to be more responsible in using credit cards in their transactions. Second, more shopping establishments can offer this payment scheme because many consumers now accept this payment method. Thirdly, financial institutions providing credit cards in the Philippines can have an understanding and insight into the factors that impact the perception and attitude of Filipino consumers on the use of credit cards in shopping, which can help them model their marketing strategies and credit card offerings that are aligned to the needs and preferences of Filipino consumers due to many consumers are now accepting the kind of payment method. At the same way, credit card providers, such as financial institutions, can tailor their marketing strategies and product offerings to better meet the needs and preferences of Filipino consumers. Finally, the government will be able to learn about the usage of installment payment schemes by Filipino consumers in this study. Through this, they can create programs to help Filipinos become more financially literate. Additionally, through this, the government can develop new policies that would protect consumers and sellers using the installment payment scheme.

9. Limitations and Recommendations for Further Study

The study primarily targeted Filipino consumers who frequently use credit cards for purchases, with ages belonging to four generations: Baby Boomers, Generation X, Millennials, and Generation Z. However, the study's outcome depicted an unequal distribution of participants from the four generations, with Generation Z (age 21 to 26) accounting for almost half of the participants. Although the researchers guaranteed the data's validity, the study results may have minimal biases in line with this limitation. With that, future studies may focus on a specific generational group or may have a set number of respondents coming from different age generations, as the generational gap could potentially affect various factors in the study, such as Financial Literacy, Competence, and Autonomy, which consequently influence the consumers' perception of using credit cards for purchasing.

Furthermore, future research studies can explore and integrate other theories, aside from the Theory of Planned Behavior and Self-Determination Theory, that may be relevant to studying people's behavior and perception. With the study incorporating only a total of nine variables that influence the buying behavior and usage of credit cards by Filipino consumers, future researchers may also add other factors or variables that are not within the scope of the study; they may explore the effect of current trends in the society, the type of products or services that consumers usually avail using credit cards, advantages and disadvantages of credit card usage, and the impact of socio-demographic factors, such as age, gender, income, education, residential location or address, and occupation of

Filipino consumers, which may be considered a vital variables for determining consumer perception and behavior towards the use of credit card to purchase.

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