

Linkage between Entrepreneurial Competencies and Business Success: The Case of Micro and Small Business Enterprises in Concepcion, Tarlac

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ABSTRACT

Entrepreneurship and small businesses facilitate economic development. The study contributes to deepening the understanding of the behavior of small business owners and the drivers towards their business success. It examines the effect of personality traits, personal effectiveness competencies, industrywide competencies, business and personal characteristics on business success using the Ordinary Logistic Regression model. It also compares the importance of these critical success factors based on their personal and business characteristics using Independent Sample T-test and ANOVA. The results showed that entrepreneurs' assessments of the importance of these indicators do not significantly vary. Openness, flexibility, ability to deal with unforeseen events, and risks assessment capability were statistically significant in explaining business success. The marginal effects results did not identify significant indicators in explaining business success, as entrepreneurs regard these drivers as equally important. In Model I, gender, age group, and family support were statistically significant to business success using odd ratios. The business characteristics did not explain business success in Model II, while gender and family support were statistically significant in Model III. The results provide interesting policy insights among policymakers in fostering start-up business or entrepreneurship in developing countries.

Keywords: Business success, entrepreneurial competencies, personality traits, personal effectiveness.

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1. INTRODUCTION

Studies that were conducted on entrepreneurship were mostly related to entrepreneurial intentions (Kim & Huruta, 2022; Mamun *et al.*, 2016), orientations and motivations (Loan, 2023; More & Rakibe 2023), personality traits (Agbenyegah & Mahohoma, 2020;

Mendoza *et al.*, 2023; Sobaih *et al.*, 2022), and the determinants of business success or performance (Pattanayak & Kakati, 2023; Sumawidjaja *et al.*, 2019) among others. In most economies, the presence and growth of small businesses are increasing.

Akeem & Adekanmbi (2016) highlighted the contribution of entrepreneurship in the establishment of new and small businesses. Successful entrepreneurs were found to possess certain personality traits, such as risk taking, educational attainment, and opportunity seeking. Among small enterprises, Stephan *et al.* (2015) mentioned the need for survival or success can explain one's motivation for entrepreneurial activity. Knowledge of these motivations can help understand the differences in the growth, success rate, and performance of businesses. Their findings revealed that family and financial-related motivations are usually higher during recession.

It is also imperative to determine the factors that contribute to the success of a business. Several studies (Al-tit & Omri, 2019; Chairaksa & Pankham, 2023; Garcia, 2015; Lee, 2016; Pranowo *et al.*, 2020; Radzi *et al.*, 2017; Sumawidjaja *et al.*, 2019; Tehseen & Ramayah, 2015) have documented the several indicators that influence business success and many of these studies were related to the investigation of the traits and competencies that a person must possess to be successful. Some of these authors utilized several entrepreneurial characteristics and competencies gathered from various literature and tested these entrepreneurial characteristics among businesses owners/entrepreneurs.

Lazar & Paul (2017) evaluated female entrepreneurs in Nigeria and found positive influences of the strategic, organizing and opportunity competencies on their performance. In another study, Sundah *et al.* (2017) utilized work attitude and five models of entrepreneurial competencies (managerial, marketing, financial, technical, and human resources) in enhancing successful business canvas in Indonesia. The positive effects on the success of the business canvas were evident, especially the impact of human resource competencies among small business owners in Nigeria.

While numerous studies only focused on selected predictors of business success, usually one aspect of entrepreneurial competencies or personality traits, this study intends to fill the gap by combining these drivers of success and examining their impact on business success. Likewise, there are limited or hardly any studies measuring the impact of personal and business characteristics and their combined effects on the success of the business. The authors believe that the choice of the research locale is not a deterring factor in understanding the underlying factors that influence the behavior and success of business owners/entrepreneurs. The authors believe that this study can contribute to selected United Nations' Sustainable Development Goals: SDG 5 (gender equality), SDG 8 (decent work and economic growth) and SDG 10 (reduced inequalities), especially that small business ventures and micro enterprises are highly encouraged and supported by the government not only in the Philippines but also in other developing countries.

This study evaluates the critical success factors of the business owners or entrepreneurs in Concepcion, Tarlac. To achieve this objective, the researchers discussed and compared the level of importance of personality traits and entrepreneurial competencies of the survey respondents based on their personal and business characteristics. It also analyzed the influence of these factors on their business success.

2. LITERATURE REVIEW

2.1 Personality Traits and Entrepreneurial Competencies

Tehseen & Ramayah (2015) cited that entrepreneurial competencies are usually possessed by people who are enthusiastic in establishing a business and continuously enhancing it. Kim *et al.* (2018) examined the critical success factors among design-based venture and technology-based startup companies using entrepreneurship, innovation, technology, and economics factors. They found innovation and entrepreneurship to be the most important factors. Among the entrepreneurship factors, sensitivity to risk and the entrepreneur's competencies ranked fourth and fifth among twenty indicators.

Kerr *et al.* (2017) asserted that the five (5) big personality traits do not distinguish an entrepreneur from a non-entrepreneur, but they affect one's transition to entrepreneurial development at all levels. Entrepreneurs have a high tolerance to risk, which is sometimes misinterpreted due to their high need for achievement. People with optimistic attitudes or traits have the tendency to undertake entrepreneurial activities that are riskier compared to others. Those with low levels of risk preference exhibited high relationship and tolerance traits.

Omar *et al.* (2017) found that agreeableness garnered the highest score among the personality traits examined. They noted that this trait together with willingness to help, friendliness and flexibility are positively and significantly affecting the performance of Malaysian entrepreneurs. Skrifter (2017) investigated how passion affects entrepreneurs' decision making and found that among nascent entrepreneurs, "harmoniously" passionate individuals normally use the availability of new resources, opportunities and other alternatives to control or explain their actions, while "obsessively" passionate individuals would react on certain conditions where causal decisions take place due to inter- and intra-personal pressures arising from the need for social acceptance, superiority and the enhancement of one's self-esteem. The study conducted by Mendoza *et al.* (2023) focused on the impact of big 5 personality traits on the risk tolerance of students in the Philippines and found that extraversion, their openness to experience, and neuroticism, have significant impact on business success. These factors were also included in the personality traits used by the authors in this study of business owners in Tarlac.

2.2. Nexus among Entrepreneurial Competencies, Business Performance, and Success

Different authors utilized several tools to measure success or business performance of entrepreneurs, business owners, or enterprises. Sakib *et al.* (2022) applied the structural equation model in examining the influence of entrepreneurial competencies on the performance of SMEs in Bangladesh by using six indicators, namely, opportunity, commitment, learning, organizing and leading, strategic, and relationship competencies. Except for opportunity competency and strategic competency, all other indicators significantly influenced their performance. It only proves that entrepreneurial orientation and strategic competencies are not the priorities nor inherent among these entrepreneurs. Meanwhile the study of More & Rakibe (2023) showed mixed results when the relationship between entrepreneurial orientation and business performance of Indian entrepreneurs were analyzed using four variables: autonomy, risk-taking, innovation and proactiveness. Among these variables, only innovation and proactiveness were found to

be positively correlated with business performance. In another study, Loan (2023) examined risk taking, innovation and proactiveness as the components of entrepreneurial orientation among SMEs owned by women in Vietnam. Both innovation and proactiveness positively influence their business performance. Human from entrepreneurial orientation, they found that entrepreneurial competencies (defined as business capacity of the entrepreneurs), social capital, quality of human resources, and government policy are also important determinants of business performance. However, the influences of these factors are low or weak.

Al-tit & Omri (2019) investigated several management factors (internal communication, work environment, management commitment and support and HR management) which were collected from different studies to describe entrepreneurial characteristics and they found their significant effect on business success of entrepreneurs in Saudi Arabia. Garcia (2015), on the other hand, utilized twenty-one indicators of business success in Puerto Rico and classified them into 5 groups, and among them are the owner's business strategies and individual factors. They found mixed results in his study. Khan *et al.* (2021) investigated the impact of entrepreneurial traits and orientation on entrepreneurial competencies and the performance of small businesses in Pakistan and their findings revealed that entrepreneurial competencies mediate between the relationship between business orientation indicators and entrepreneurial success.

In another study, Sumawidjaja *et al.* (2019) analyzed opportunity, conceptual, and commitment competencies on the success of entrepreneurs of SME start-up businesses in the leather, and leather goods and footwear in Indonesia. The results showed that these entrepreneurial competencies have positive and significant impact on business success. Khan & Siddiqi (2015) applied the multinomial regression model in examining the influence of different entrepreneurial indicators (personal profile, growth, management and technological capabilities, and structure of the market) and non-entrepreneurial indicators (firm demographics) on the growth of selected companies in India. Education, financing, risk taking, existence of family business, quest for independence, business experience, innovativeness and other factors were found to be significant predictors while firm size, absence of market orientation and "unique knowhow" were found to be insignificant.

2.3. Influence of Personal and Business Characteristics on Entrepreneur's performance

Robichaud *et al.* (n.d.) utilized both personal and business profiles to compare the performance of business between men and women, and between necessity and opportunistic entrepreneurs. Only educational attainment, confidence, income, and networking were significant factors of business performance when comparing men with women entrepreneurs. Results revealed that women possess skillsets in starting a business compared to men, and those skillsets associated with successful entrepreneurs are important factors. Male entrepreneurs in the opportunity-driven categories are likely to engage in growth-oriented activities than women. Necessity-driven entrepreneurs have lower education and generate less income compared to opportunistic entrepreneurs.

Darnihamedani (2016) also investigated the influence of human capital, market characteristics and country characteristics on the innovative performance of companies. Her findings reveal that educational attainment and one's experience prior to any business

undertaking are primary drivers of good business performance among new venture businesses. In comparing unemployed groups of people with higher and lower levels of education, those with higher formal education are likely to engage into a business venture. She also utilized entrepreneurial skills and one's attitude towards risk and human capital investments as control variables and found positive and significant relationships. Tobora (2015) cited that aside from the impact of the legal and macroeconomic factors on the activities of small business owners, creditors or investors, infrastructure, financing, bureaucracy, low product demand, and technology contribute to the problems they encounter.

Isaga (2015), studied the owner-managers' demographic characteristics' influence on the growth of SMEs, measured in terms of its sales, employment generation, and total assets. Age, family background, education, and working experience were also used to predict growth performance and the study revealed that these demographic profiles are positively associated with entrepreneurial characteristics and contributed to the success of entrepreneurs. While education and working experience were important factors toward SME growth, these factors allow entrepreneurs to increase business networks, meet customer requirements and broaden management knowledge as contrasted to those who lack these characteristics. Al-tit & Omri (2019) also investigated the influence of individual characteristics and found its positive and significant influence on SMEs in Saudi Arabia, while it showed insignificant effect of business characteristics.

3. OBJECTIVES

The primary objective of this study is to investigate the factors that influence the perceived success of micro and small business owners. Specifically, it seeks to answer the following objectives:

- 3.1. To determine difference in the entrepreneurs' assessments on the level of importance of personality traits, personal effectiveness competencies, and industrywide competencies on their business success based on their personal and business characteristics.
- 3.2. To examine the influence of personality traits, personal effectiveness competencies, industrywide competencies, and personal and business characteristics on the overall success of the business.

4. FRAMEWORK

Various authors used numerous factors to measure their effects on the performance or success of a firm. These came from the personality traits and competencies of the entrepreneur or potential business owner. In the previous section, several studies were reviewed to account for the different success factor metrics used by many authors. Caird, as cited in Holienka *et al.* (2015) considered different frameworks in determining the personality traits of an individual. These were explained by Akeem & Adekanmbi (2016) as specific personality traits that are common among enterprising people. Holienka *et al.* (2016) mentioned that many of these characteristics were initially proposed by scholars such as McClelland (1961), Schumpeter (1934) and other known authors. Among these characteristics include an entrepreneur's propensity to take risk, commitments, ability to lead, optimism, passion for excellence, obsession for opportunities, risk tolerance,

ambiguity, one's creativity, leadership, and a host of other characteristics inherent in an entrepreneur and can determine the success of a person in managing his business.

In the analysis of the factors crucial to the success of micro and small enterprises in Tarlac City, Huan (2016) illustrated a model by means of a pyramid. There are five major categories in the pyramid, namely, personal characteristics, personal effectiveness, academic, workplace, and industrywide competencies. Only three categories (personal characteristics or traits, personal effectiveness, and industrywide competencies) were included, as they are deemed to be applicable for the said study considering that there are also multiple questions for the variables under each of the two critical success factors.

The personal and business characteristics of the business owners will be compared to their ratings for the three entrepreneurial competencies shown above. There are 11 personality traits competencies, 17 effectiveness competencies, and 11 technical competencies. Personal effectiveness competencies consist of six sub-categories, namely, inter-personal skills, willingness to learn, risk taking, strong initiative, adaptability, and flexibility and ambition. Industrywide competencies include risk assessment, use of innovation and invention, application of the principles of entrepreneurship, planning, finance, marketing, and business operations. All these constructs were included in this study to evaluate their importance to the success of the business.

The following hypotheses were tested in this study:

- HO1 The level of importance assigned to personality traits, personal effectiveness competencies, and industrywide competencies on business success does not significantly differ between male and female business owners.
- HO2 The level of importance assigned to personality traits, personal effectiveness competencies, and industrywide competencies on business success does not significantly differ between single and married entrepreneurs.
- HO3 The level of importance assigned to personality traits, personal effectiveness competencies, and industrywide competencies on business success does not significantly differ among business owners based on their educational attainment.
- HO4 The level of importance assigned to personality traits, personal effectiveness competencies, and industrywide competencies on business success does not significantly differ among business owners based on their initial capitalization.
- HO5 The level of importance assigned to personality traits, personal effectiveness competencies, and industry-wide competencies on business success does not significantly differ among business owners based on the business/company's age.

To measure the effect of personality traits and entrepreneurial competencies on the overall success of their business, the following hypotheses were tested:

HO6 Personality traits, personal effectiveness competencies, and industry-wide competencies do not significantly influence business success among entrepreneurs.

HO7 Personal characteristics, business characteristics and their combined effects do not significantly affect the overall success of the businesses.

5. METHODOLOGY

5.1. Research Design

The study utilized explanatory and descriptive research designs. It is descriptive because with standardized survey questionnaires, the factors that influence business success of entrepreneurs or businesspeople are identified. The questionnaire was based on the study of Lee (2016) where the predictors (critical success factors using entrepreneurial competency indicators) of business success were determined. It also computed the mean scores of each indicator derived from the Likert-Scale design. This study is also evaluative and quantitative because it utilized statistical methods (analysis of variance, independent Sample/Student's T-test, and Ordinal Logistic Regression model in analyzing the results.

5.2. Method of Data Collection

To achieve the objectives of the study, the authors gathered primary data through a structured survey based on the study of Lee (2016). The statements were in the Tagalog language. Pre-testing was undertaken among ten business owners. The researcher also noted the valuable inputs and suggestions. It took 15-20 minutes to answer the survey. Interviews were also conducted by the researchers using the survey questionnaire, with seven entrepreneurs who cannot personally complete the questionnaires.

The respondents rated the importance of the three success factors - personality traits, personal effectiveness competencies and industrywide competencies, using a 5-point Likert-scale, with 5- very important; 4 – important; 3 – somewhat important, 2- not important and 1- not very important.

Respondents also assessed their success in business using a 4-point Likert scale: very successful, successful, somewhat successful, and not successful.

Convenience-sampling was applied in selecting the 71 entrepreneurs who agreed to accept the survey invitation. Fifty-nine (59) questionnaires were retrieved, representing 83 percent of cooperative respondents, but only 50 good questionnaires were processed and analyzed.

5.3. Method of Data Analysis:

For the statistical treatment in analyzing the results of the survey, the following statistics are used:

5.3.1. Independent Sample/Student's t-test and Analysis of Variance (ANOVA) - These parametric tests were used to compare the ratings provided by business owners on the importance of personality traits, personal effectiveness competencies, and industrywide competencies to their business success. These also answered Hypotheses 1 to 5 as mentioned in the preceding discussion.

Like Student's T-test, one-way Analysis of Variance (ANOVA) was used to compare means responses on the three (3) entrepreneurial competencies when business owners are grouped according to highest educational attainment, age of the company and initial capitalization.

5.3.2. Effect size using Cohen's d values - The effect size was quantified using Cohen's d to compare the mean scores of the entrepreneurial competencies when ratings were grouped according to personal demographics. The effect size is also used to compare the magnitude of the differences in the means generated between two groups (Nieuwenhuizen & Swanepoe, 2015). As mentioned by Ellis (2010), if the Cohen's d or standardized mean difference is 0.20, the threshold is small with a correlation coefficient of 0.10. It is considered medium, large, and very large if Cohen's d values are 0.50, 0.80 and 1.30, with correlation coefficients of 0.30, 0.50 and 0.70, correspondingly.

5.3.1. Ordinal Logistic Regression model (OLR) was applied to analyze the influence of independent variables on business success. This regression model is considered a good measure using categorical variables. Since the response variable, (rating on business success), has four outcomes and are ordinal in nature, using qualitative responses to assess how successful their respective business was, is the best fit for the study (Gujarati & Porter, 2009).

The OLR model is also an appropriate tool to answer problem statement 2 and test Hypotheses 6 and 7 to evaluate the significant effects of explanatory variables (personality traits, personal effectiveness competencies and industrywide competencies) on the response variable (perceived business success). It measured the influence of personal characteristics (Model 1) and business characteristics (Model 2) and the combined effect of the two (Model 3) on the success of the respondents' business. Business success was utilized as the dependent variable using a 4-point Likert scale to measure how successful the business turned out over the years it had been operating. This econometric model was deemed the best fit in estimating the marginal effects of the predictor variables on the possible variations in business success ratings.

Formula:

$$\text{Logit (BusSuccess)} = \text{Bus Success}/1-\text{BusSuccess} = u + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots + \varepsilon_i$$

where:

μ = overall mean values

$x_i \mu$ = independent variables

BusSuccess = business success ratings

β_j = regression coefficients to be estimated

ε_i = error terms

X is used as a vector of the explanatory variables mentioned above and their coefficients. Personality traits, entrepreneurial competencies, business profile and personal profile of

business owners, as shown in the conceptual paradigm (Fig.1), are utilized to measure their effect on business performance and success as an objective of this study. This study can already establish the influence of the independent variables on the dependent variable, based on the statistical significance of the final model's odds ratios and marginal effects results.

To check the reliability of the entrepreneurial competency indicators used in the survey, Cronbach's Alpha test was utilized. Table 1 reveals the results for the Cronbach's alpha test.

Table 1. Alpha Values for the Personality Traits and Entrepreneurial Competencies Ratings

Variables	Cronbach Alpha	Number of Items
Personality traits (PRT)	0.814	11
Personal Effectiveness Competencies (PEF)	0.936	17
Industrywide Competencies (IND)	0.941	11

Source: author's computation using Stata

The reported alphas range from .814 to .941, which are higher compared to the acceptable value of 0.70 (Tavakol & Dennick, 2011). The weighted means shown above prove that there is a reasonable degree of reliability among the different critical success factors used in this study.

6. RESULTS AND DISCUSSIONS

6.1. Comparison of Ratings on the Importance of Personality Traits and Entrepreneurial Competencies on Business Success

Table 2. Individual Sample T-Test on the Differences in the Level of Importance provided by Entrepreneurs on their Entrepreneurial Competencies

Hypotheses	Grouping	Entrepreneurial Competencies	t/F	p
HO1	Gender*	PRTAve	0.793	0.432
		PEFAve	1.382	0.173
		INDAve	1.429	0.159
HO2	Marital Status*	PRTAve	-0.656	0.515
		PEFAve	0.179	0.858
		INDAve	-0.114	0.910
HO3	Education**	PRTAve	1.26	0.350
		PEFAve	0.996	0.019
		INDAve	1.671	0.476
HO4	Initial Capitalization**	PRTAve	1.931	0.088
		PEFAve	1.629	0.153
		INDAve	2.045	0.071
HO5	Company Age**	PRTAve	4.016	0.004
		PEFAve	2.176	0.074
		INDAve	2.716	0.032

Author's computation

Table 2 shows the results of the individual sample T-test and ANOVA that were generated for the personal and business profiles of the entrepreneurs in Tarlac. The objective is to determine significant differences in the level of importance provided by the entrepreneurs on personality traits, personal effectiveness competencies, and industrywide competencies in managing their businesses.

Among the male and female entrepreneurs, the results reveal that there is no significant difference in their assessment on the importance of personality traits, personal effectiveness competencies and industry-wide competencies in the management of their business. When the entrepreneurs were grouped according to their marital status, the ratings they provided on the level of importance of personality traits (PRT), personal effectiveness competencies (PEF), and industrywide competencies (IND) were not significantly different. Likewise, the importance ratings on various critical success factors in managing their business do not differ between single and married entrepreneurs.

To answer hypothesis 3 (HO₃), the null hypothesis is accepted among educational attainment groups. The level of importance scores provided by business owners for the personality traits and industry-wide competencies were similar, as determined by the one-way ANOVA test where the p-values are greater than 0.05 significance level. However, the p-value generated for personal effectiveness competencies was lower than 0.05, which means that there is a significant difference in their assessment of the importance of these competencies in managing their business and their success.

The study also determined if the ratings on the importance of these three predictor variables to business success differ among entrepreneurs based on their initial capitalization and age of the firm. Table 2 shows there are no significant differences among companies when they are grouped according to initial capitalization. This can be determined in the one-way ANOVA test results for PEFAve ($F[7,43] = 1.629, p = 0.153$), PRTAve ($F[7,43] = 1.931, p = 0.088$), and IND Ave ($F[7,43] = 2.045, p = 0.071$), correspondingly. However, at 0.10 significance level, there are statistical differences in the contribution of the personal traits and industrywide competencies among these businesses based on their initial capitalization. This implies that there is a higher variance among the groups' mean scores than those within each group's mean scores.

There are no statistically significant differences for PEF Ave among different companies based on age, as determined by the one-way ANOVA test ($F [5,45] = 2.176, p = .074$). However, statistically significant differences between PRTAve and IND Ave were found. As shown in the Tukey output for PRT Ave, there were differences among companies which had been operating from 6-10 and 11-15 years. For IND Ave, 11-15 and 21-25-year-old companies showed differences in their means. This only implies that those who have been in the business longer (11-15 years of operations), considered personality traits (PRT Ave) as critical success factors compared to those who have been operating from 6 to 10 years.

6.2. On the Impact of Personality Traits, Entrepreneurial Competencies, Personal and Business Characteristics on Business Success.

Table 3 exhibits the marginal effects and odds ratios generated using ordinal logistic regression to examine the influence of the individual components of the three indicators (PRT, PEF and IND) on overall business success. The marginal effects did not identify significant indicators that can explain the success of the businesses of the entrepreneurs in Tarlac, as their p-values were higher than the critical values due to the higher ratings given for many critical success factors related to entrepreneurial competencies. These factors are very important but the entrepreneurs' views about success might be similar.

Table 3. Odds Ratios and Marginal Effects after Ordinal Logistic Regression between Business Success, Personality traits & Entrepreneurial Competencies

Business Success Rating	dy/dx	Odds Ratio
Predicted Probability	0.0096	
Independent Variables (Success Factors)		
<i>Personality Traits</i>		
PRTAuto	0.0029	0.6611
PRTInno	0.0040	0.5622
PRTProa	-0.0048	1.9845
PRTCmmt	0.0029	0.6614
PRTPasn	-0.0029	1.5045
PRTTole	-0.0066	2.5647
PRTOpen	0.0235	0.03551*
PRTTena	0.0018	0.7718
<i>Personal Effectiveness Competencies</i>		
PEFPrst	0.0130	0.1567
PEFChng	-0.0024	1.3986
PEFConf	-0.0110	4.8073
PEFComm	-0.0087	3.4610
PEFRisk	-0.0035	1.6422
PEFFdbk	0.0061	0.4199
PEFFlex	-0.0262	41.8615**
PEFUnde	0.0049	0.4999
PEFTeac	-0.0057	2.2426
PEFDvrs	-0.0135	6.8612
PEFSolu	0.0030	0.6556
PEFUngo	-0.0157	9.3337*
PEFCont	0.0141	0.1353
<i>Industrywide Competencies</i>		
INDMnic	-0.0065	2.5324
INDCnee	-0.0136	6.9470
INDTrnd	0.0123	0.1730
INDTbld	0.0107	0.2184
INDDaop	0.0073	0.3515
INDImpr	0.0044	0.5344
INDHcap	-0.0023	1.3794
IWCUnce	0.0121	0.1792*

Source: Based on author's computation

* Statistically significant at 10%

** statistically significant at 5%

*** statistically significant at 1%

However, when the odds ratios were computed, openness to experience in the business venture (PRTOpen), flexibility to adopt with uncertainties (PEFFlex), ability to deal with unforeseen events (PEFUnfo) and ability to assess several types of risks (INDUnce) were found to be significant explanatory variables for their success. Feedback and ability to deal with unforeseen events got the highest odds ratios compared to other competency indicators. This means that for every one unit increase in PEFFlex and PEFUnfo ratings, the odds of being very successful versus the combined effect of being successful and moderately successful is 41.86 and 9.33 times greater, respectively, all other indicators being held constant. PEFFDrive also has a high odds ratio. Further findings reveal that only a few of the respondents gave very successful ratings compared to those who rated their business success as successful and moderately successful.

Table 4. Odds Ratios and Marginal Effects for Demographic Profile

Business Success Rating	Model I		Model II		Model III	
	dy/dx	Odds Ratio	dy/dx	Odds Ratio	dy/dx	Odds Ratio
Predicted Probability	0.0096		0.0185			0.0084
Age Group	0.0042	0.6401**			0.0020	0.7916
Gender	-0.0173	8.0414***			-0.0155	8.3673***
Highest Education	0.0016	1.6569			0.0021	0.7761
Civil Status	-0.0048	1.6569			-0.004	1.6066
Working Experience	0.0011	0.8887			0.0015	0.8333
Business Experience	-0.0155	4.2532			-0.0102	3.0712
Employed	0.0093	0.4817			0.0112	0.3982
Family Support Rating	-0.0112	3.2709*			-0.0112	3.8061**
Initial Capitalization			-0.0133	1.8028	-0.0015	1.1917
Company Age			0.0035	0.8249	0.0019	0.7921
Business as Primary Income Source			-0.0018	1.1044	-0.0019	2.3032

Source: Based on author's computation

* Statistically significant at 10%

** statistically significant at 5%

*** statistically significant at 1%

Table 4 shows the marginal effects and odds ratios using three specifications. For the three models, the marginal effect results did not identify significant indicators that can explain the success of the businesses in Tarlac, as the p-values were higher than the critical values. This can be explained by the higher ratings provided for most of the entrepreneurial competencies where the business owners believe that these factors are very important to business success; hence, their views about success might differ.

In Model I, only the personal characteristics of the business owners were included, grouped according to their personal characteristics (demographics). Gender, age group, and family support significantly have effects on business success when the odd ratios were generated. Thus, for every unit increase in gender, the odds that female versus male business owners will be successful are 8.0414 times greater. Most female respondents believe that they are only moderately successful compared to their male counterpart who

are successful. Hence, the number of very successful owners are fewer than successful ones and the responses are almost similar for male and female entrepreneurs. For the business experience, the odds between high support versus moderate and low support provided by their families are 4.2532 times greater. However, when the marginal effects of the predictor variables were measured, none of these variables statistically influenced business success.

In Model II, the marginal effects from the OLR also did not reveal any business characteristic variable that is statistically significant to their business success. For other business owners, the income generated is insufficient for any future expansion or additional investments. Other respondents are even able to use funds from sales for their non-business-related expenses. The odds ratios are also not high, especially for the company age where there is only a 0.85 difference in the success of their business among seven categories of capital.

Model III provided the combined effects of the personal and business characteristics on business success. It reveals that the marginal effects of the combined explanatory variables are also not significant on their success. In fact, the p values for the three significant indicators (age, gender, and family support) increased. Only gender and family support were statistically significant. For Model I and Model III, the effect is negative. This suggests that female business owners find their business less successful compared to male business owners. This can be ascribed from the significant expectations among female respondents who take dual roles. It is quite surprising that the support of the family is not important and is negatively associated with business success. The less support they receive, the more successful the business will be. Since several of these businesses are micro or small-scale, business owners will do everything to keep the business. Results revealed that many businesses were created out of necessity, although some female and young business owners might take advantage of any entrepreneurial activity to start a new business venture.

7. CONCLUSIONS AND RECOMMENDATIONS

The study aimed to determine the critical success factors using personality traits, personal effectiveness competencies and industrywide competencies that business owners must possess to be successful. It also determined the impact of these factors, including personal and business demographics on the overall success of the businesses. Many believe that these factors are important indicators of their success, and other forms of competencies, such as-risk-associated characteristics, flexibility, and others). For most of these factors, many respondents provided “very important” ratings, as shown in the Student T-test and ANOVA results comparing the importance of these to their success. The Student T-test and ANOVA revealed a significant difference among business owners when they were grouped according to business support they received from their families, initial capitalization, and company age in their ratings related to personal characteristic competencies. Likewise, variations were also evident in the INDAve when they were grouped according to age, years of operations, and initial capitalization. Despite diverse business and personal profiles, respondents' ratings on their overall business success were almost similar, as shown in the high ratings they provided for many of the competency indicators.

Only gender, age group and support they received from their family members were found to be significantly affecting their business success. Male and young business owners were very successful compared to female and older business owners. This can be explained by the dual role played by women entrepreneurs. Another contributing factor is the disparity in the business success ratings provided by the respondents when they were grouped according to gender, experience in managing their business, and age of their business. Based on the marginal effects results, none of the explanatory variables could explain their overall business success. The results only prove that the choice of the explanatory variables to predict the success of the business or the entrepreneur is not a good measurement for this group of respondents. It is recommended that future studies can be undertaken related to the impact of other entrepreneurial competencies such as human resources, workplace. technical, technological competencies, and others.

The respondents' measurement of success when the survey was conducted may have been influenced by several factors other than the performance of the business over the years, such as current business and financial environment, macroeconomic indicators, and other factors. This explains why 43 percent rated their success as moderate. The authors believe that different groups of business owners may have different interpretations of business success and a comprehensive model or combination of various indicators can explain business success. Aside from the use of additional or combination of entrepreneurial competencies, future studies on the use of mediation or moderation variables to further explain the influence of the determinants of business success be made. Another option is to increase the number of respondents and explore other research locales (e.g.: compare businesses in the urban and rural areas or those who are operating and failing) to make the study more valuable.

Since many businesses have been operating for more than 10 years, the criteria for the selection of the respondents must be defined by comparing potential, nascent and existing (e.g., more than 5 years) businesses. It is also recommended that other indicators of business success must be defined using quantitative data (e.g.: financial or operational). Research that investigates motivations for engaging into business, challenges faced by business owners, financing needs and other operational activities can also be explored.

Considering that this study was undertaken in a first-class town, the authors believe that this study was able to contribute to existing bodies of knowledge in the field of business or entrepreneurial studies. The results of the study are valuable not only to the researchers but also to the government in designing support schemes (e.g.: financial, entrepreneurial education, community support groups, and others) that will encourage entrepreneurship and ultimately spur Philippine economic growth and development. This is also in line with the worldwide call for the promotion of the United Nations' Sustainable Development Goals, especially those related to the promotion of gender equality (SDG 5), provision for a decent work and economic growth, (SDG 8), and reduction of inequalities (SDG 10). Moreover, it will help the government not only in the Philippines but also in developing and developed economies in creation more jobs and in encouraging the creation and/or development of small business ventures and Micro, Small and Medium Enterprises (MSMEs) towards a green and sustainable economy.

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