# Influence of entrepreneurship education, societal enhancers, and environmental factors to entrepreneurial activities in the Davao region

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**Abstract**

This descriptive, correlational, cross-sectional study looked into the conditions that influence entrepreneurial activities in Davao Region. It applied Multiple Regression Analysis (MRA) to establish the relationships of BS in Entrepreneurship education, societal enhancers and environmental factors to the promotion of entrepreneurship. The 106 respondents from Batches 2010 to 2015 mostly aged 18 to 30 years old were purposively selected for their active business engagements from the graduates of five Higher Education Institutions (HEIs) in the region. Top reasons for their business endeavors were their desire for new product development, job generation, process improvement and entry into the international market. Most of the respondents had failed business ventures that lasted less than a year due to lack of business know-how, insufficiency of funds, lack of business profitability, lack of market acceptability and personal reasons that included family concerns. The regression model Entrepreneurial Activities = 1.014 + 0.753 Societal Enhancers was established with a coefficient of determination (r2) of 0.441 and an F value of 26.837 (p-value =.000) suggesting that all independent variables used together in this model as a set were significantly related to the dependent variable. This research established that societal enhancers characterized by social and cultural norms, technological readiness and entrepreneurial aspirations significantly influence entrepreneurial activities in Davao Region.

**Key Words:** entrepreneurship; SMEs; business education; startups; multiple regression

## Introduction

The common Filipino, despite the improved economic rating of the Philippines, has not really felt any improvement in their lives. The increasing population, estimated by United Nations to be 101,802,706 by 2015 (Worldometers, 2015) plus weak governance, corrupt political climate, and the high unemployment rate serve as hindrances to economic growth (USAID Philippines, 2011). In "Graduate Employability in Asia", the 2009 unemployment rate of 7.7% was second to Indonesia's 8.4% (Valenzuela & Mendoza, 2012), however, many felt that this rate should have been higher if not because of the change in the definition of "unemployed" adopted in April 2005 that excluded those actively seeking jobs for at least six months, and those who were unwilling to find work of any kind (IBON, 2009).

The Philippines, just like its Asian neighbors, recognizes the value of micro, small and medium enterprises (MSMEs) in keeping up with the changes brought by a global economy (ASEAN, 2008). This recognition is supported by the Department of Trade and Industry's report (DTI, 2012) that 99.6% of registered enterprises are MSMEs whose growth is critical to economic development. Entrepreneurship from these MSMEs can be the driving force "behind a resilient national economy" (Shinozaki, 2012) creating businesses, jobs, and increasing productivity, innovation, and competition (Camposano, 2014).

The entry of globalization presents opportunities for ideas, markets, and technologies originally unavailable for local entrepreneurs. However, these can also pose threats as they will be among the most developed, experienced and competitive international corporations that can take advantage of the more inexperienced companies (McCubbrey, 2015). The global knowledge economy looks therefore at universities in providing competent, skilled, and knowledgeable human resources within this highly competitive market (Tan & French-Arnold, 2012). For sustained economic growth, even experts of the European Council (ICF GHK, 2008) zeroed in integrating entrepreneurship in all levels of the educational system as part of the strategic plan of creating jobs. This idea of global competitiveness puts pressure on the academe to review policies, quality, accreditation, and qualifications (Lam, 2010) while coping with technological changes in the modern environment. The country's K to 12 implementations were seen to be necessary as the previous high school education crammed in 10 years produced minors who were neither ready for work, nor higher education nor entrepreneurship ventures (DepEd, 2010). Furthermore, it was necessary to facilitate student transfers and exchange programs for ASEAN integration. However, adopting these changes requires a transformation process necessitating a review of graduates with the expected global competencies (Pastrana & Manabat, 2012).

These identified challenges and the attention to sustained economic growth gave birth to global interest in entrepreneurship such as that from the Global Entrepreneurship Monitor (GEM) which aims at establishing a relationship between entrepreneurship and economic development. It takes a look at the attitudes, activities, and aspirations of adults to understand what would propel potential entrepreneurs into becoming actual entrepreneurs.

GEM was developed from the traditional framework that National Economic Growth, in terms of its Gross Domestic Product (GDP) and job creation, results in business activities. In this framework, the 12 pillars of Global Competitiveness adopted from the World Economic Forum (WEF) were used to classify the countries into economic profiles (Schwab, 2015) described by the presence of GEM's so-called Entrepreneurial Framework Conditions (EFCs). These pillars are the presence (or absence) of basic economic requirements, efficiency enhancers, innovation, and entrepreneurship. GEM takes a detailed examination of the interplay of entrepreneurial opportunities, the perception of capacity, and conducive EFCs to answer questions on the extent of variation between countries that affect entrepreneurial activities, economic progress, and engagement level of entrepreneurship. GEM's Theoretical Framework (Figure 1) showed the relationships between the three indicators that make up the Entrepreneurship Profile: the entrepreneur's personal attributes; the entrepreneurs' drivers of entrepreneurial activities; and the entrepreneur's motivation of doing business – all subjects of interest in this study.

Another inducement behind this research was from a UNESCO report stating that part of the graduates un-employability in the Philippines was mainly a result of skills mismatch (Valenzuela & Mendoza, 2012), either the graduates lack the general skill set required by the job or that there is a mismatch between the number of graduates and available jobs. This mismatch

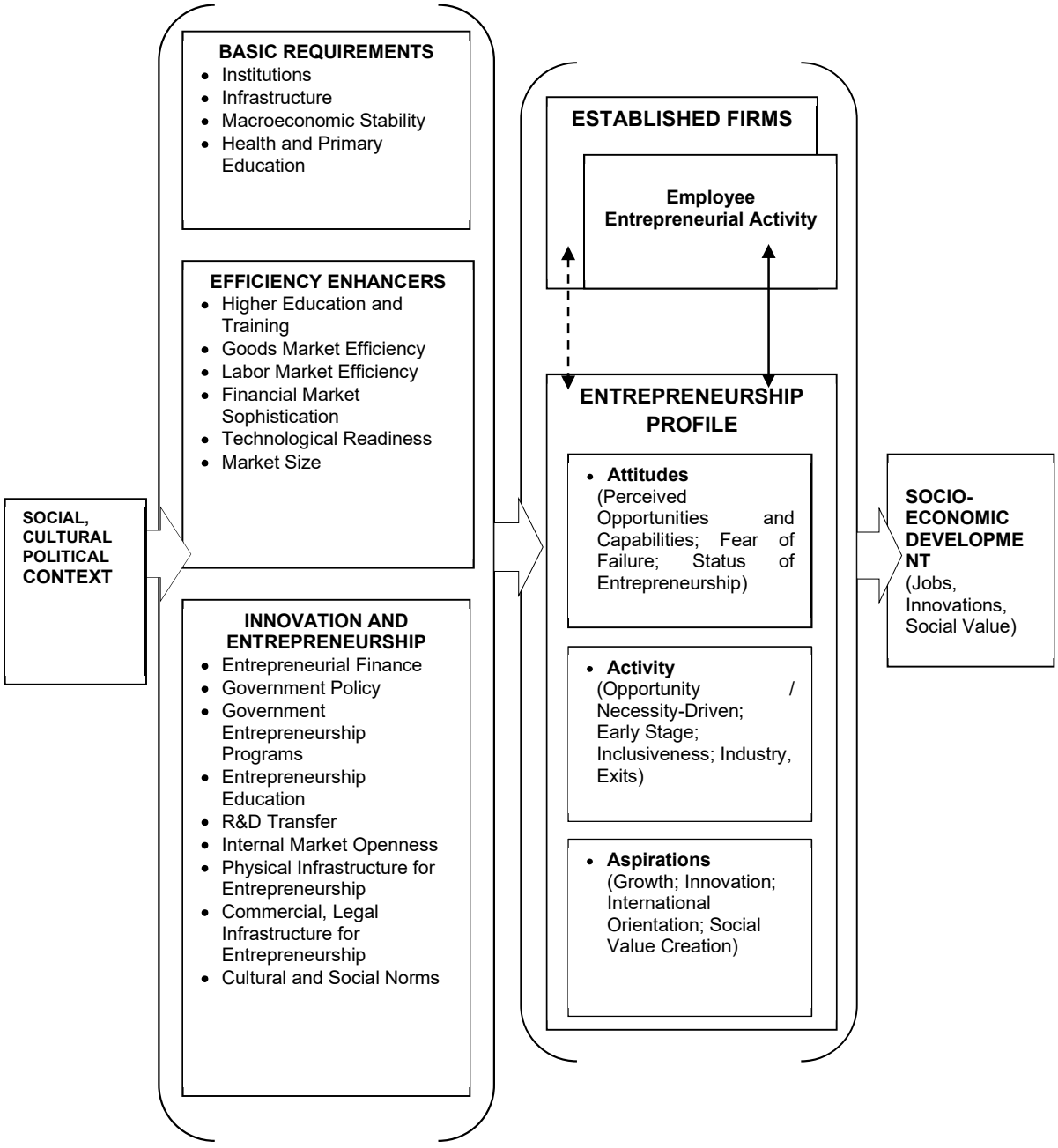


*Figure 1.* Theoretical Framework
Source: Global Entrepreneurship Monitor (GEM) Conceptual Framework

however, can be identified through graduate tracer studies that can check on the employability of the HEIs' graduates (Banzuela-de Ocampo, Bagano, & Tan, 2012) and consequently, serve as assessment tools for reviews and reforms in structure, paradigm, and pedagogy (Ramirez, Cruz, & Alcantara, 2014), and in this particular case, improving the conversion rates of BS in Entrepreneurship graduates into actual entrepreneurs.

This requires a look into the BS in Entrepreneurship program under CHED Memorandum Order No. 17 (CMO 17), Series of 2005. CMO 17 states that it aims to develop motivated entrepreneurs trained to spot opportunities, adept in preparing business plans, and competent in starting and managing their businesses. Through a study funded by the USAID, Management Systems International (MSI) has helped countries eradicate poverty towards better lives and crafted the 10 Personal Entrepreneurial Competencies (PECS) used as standards of Entrepreneurship training programs worldwide (MSI, 2015) and categorized in GEM's Theoretical Framework as Entrepreneurship Attitude.

Aside from these expected personal competencies, other indicators can be used to help evaluate the success of an educational program. In the 2013 SEAMEO RETRAC in Ho Chi Minh City attended by educators all over Asia, the successful implementation of Miriam College's Entrepreneurship Program presented five building blocks of Entrepreneurship Curriculum (Lopez, Gatchalian, Ibanez, & Serrano, 2013). The first included course definition and assessment of training based on the expected outcomes outlined by CHED. The second included academic, administrative and institutional support for entrepreneurship with CHED providing HEIs the directives for policies on resource materials, laboratory and faculty development. The third building block included differentiated instruction incorporating the HEI's own brand of values and vision. The fourth included pedagogies and learning tools that are dynamic, business-oriented, demanding, highly experiential, personal and results-oriented. The fifth included partnership and collaboration with the government, the business community, and other stakeholders that would assure learnings through immersion and exposure to business.

To improve the conversion rate of trained entrepreneurs into actual entrepreneurs, understanding of what would motivate these young graduates into going into business is crucial. The typical Filipino gets moral support and inspiration from societal enhancers such as social and cultural norms set by the family, community, and media. How these societal enhancers view entrepreneurship as a worthy and respectable endeavor or as a risky path to take, affect entrepreneurial pursuits. Shared business experiences or industry updates especially from the media, can discourage or inspire. The possible "lack of support" can add to the "fear of failure". Thus, an entrepreneur's motivation could be an aspiration for own-self, family or society or could be in terms of social improvement, financial independence, poverty alleviation or sustainable economic advancement (Teo & Tan, 2013). Technological readiness of the public is also an enhancer not only in terms of the physical infrastructure, improvement of productivity and economic growth (Link, 2007) but mostly in mindset, openness and acceptance of the commercial applications and functions of technological development or of a particular innovative activity the entrepreneur is engaged in.

The overall state of the environment can affect business engagements. The identified EFCs found to be important to entrepreneurship included financial and commercial infrastructures in

reference to the sources of capital and investments, ease of doing business, openness to new players, and changes in markets (Singer, Amoros, & Moska, 2015). Government policies play a role in the entrance and exits of investors and can bar or welcome investments and developments by policies, laws, and regulations in support or in opposition of an industry. Openness to R&D transfer can be the seedbed of innovations and can surely benefit from the collaboration of academe and industry sectors. The important role of legal and physical infrastructures in defining standards, processes, and efficiency of transactions can help protect business players and their environment. Furthermore, delays in the justice system not only increase the costs of going into legal means but also diminish the public's trust in the entire system (USAID Philippines, 2011). With the improvement in the business environment comes positive changes making goods and services affordable, promoting fairer competition that results in an overall public improvement (Mitra, 2011).

In developing its Conceptual Framework (Figure 2), this research used GEM's findings in combination with CHED's expected outcomes from the BS in Entrepreneurship program and the possible motivational value of society and immediate community to entrepreneurs.

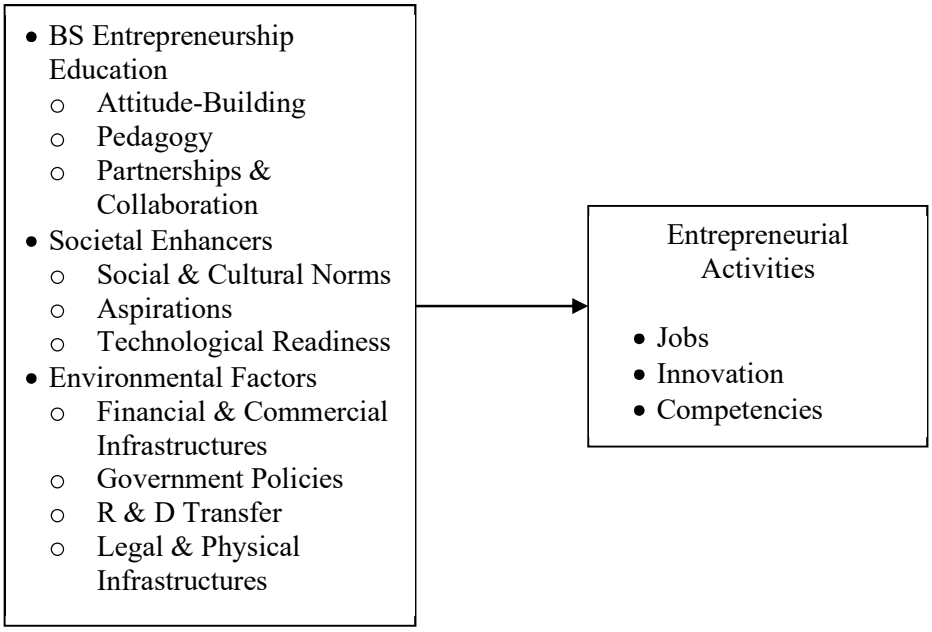


*Figure 2.* Conceptual Framework

This research classified the independent variables into BS Entrepreneurship Education, Societal Enhancers and Environmental Factors – all deemed important to entrepreneurship. These independent variables were gauged as to their significant influence to the dependent variable, Entrepreneurial Activities – in terms of the number of jobs created, the increase in innovative activities and in the improvement of the competencies of entrepreneurs.

The variable BS in Entrepreneurship Education considered three indicators - Attitude-Building, Pedagogy, and Partnerships & Collaboration, as building blocks of a successful

implementation of the BS in Entrepreneurship degree program. The variable Societal Enhancers was measured in terms of acceptability of Social & Cultural Norms, Aspirations of potential entrepreneurs, and Technological Readiness of the market. The variable Environmental Factors took into account combinations of the EFCs identified by GEM's years of research - Financial and Commercial Infrastructures, Legal and Physical Infrastructures, Government Policies and the rate of R&D Transfer.

The model generated will look into answering the general question, "What can influence entrepreneurial activities in Davao Region?" from the perspective of the graduates of BS in Entrepreneurship themselves. This study will validate the following null hypotheses:

H1: There is no significant relationship between the independent variables (BS in Entrepreneurship Education, Societal Enhancers, and Environmental Factors) and the dependent variable Entrepreneurial Activities in Davao Region.

H2: The independent variables - BS in Entrepreneurship Education, Societal Enhancers and Environmental Factors, do not significantly influence Entrepreneurial Activities in Davao Region.

Davao Region is located in the southeastern part of the island of Mindanao and is composed of Compostela Valley, Davao del Norte, Davao del Sur, Davao Oriental and the newly created Davao Occidental. It is a melting pot of different tribes not only within Mindanao but also from Luzon and Visayas. The Region is blessed with numerous scenic spots and is engaged in agro-industrial business, tourism, mining, fishing, and agriculture. It is a business hub in the export of fruits and vegetables with major seaports at Sasa, Panabo, and Mati (Alojado Publishing International, 2015) and is an ideal seedbed for young entrepreneurs.

Identifying the presence or absence of a relationship between BS Entrepreneurship Education, Societal Enhancers, Environmental Factors, and Entrepreneurial Activities could provide a better understanding of what can promote and influence entrepreneurship that can potentially result into socio-economic development in the Region.

## Methodology

The research design was descriptive, correlational, and cross-sectional, and utilized Multiple Regression Analysis (MRA) as a multivariate statistical tool to measure and interpret the primary quantitative data. Descriptive data were collected to add elements to the findings. Perception was scored using the self-constructed questionnaire and measured on a five-point Likert scale aimed at quantifying the extent to which the three independent variables deter or embolden respondents to engage in business. The questionnaire was validated by experts and reflected a strong Cronbach's Alpha reliability post hoc score of 0.932. The 106 respondents from Batches 2010 to 2015 were purposively selected from the 510 graduates of BS in Entrepreneurship from five Higher Education Institutions (HEIs) in the region (CHED Regional Office, 2016) for their active business engagements. The demographic data were analyzed in terms of frequency and percentages. The means of the indicators per variable were computed to form a total of four sets of means to represent the independent variables and the dependent variable.

MRA was used to come up with the "best possible fit" and to explain the amount of change on the dependent variable on the basis of the amount of change on the independent variables. Normality, collinearity, homoscedasticity tests and the sufficiency of observations were made to test the applicability of MRA. After which, the Enter method was used to determine which independent variables made any significant contribution to the model. Each hypothesis was tested for significance. The data was split into two and each set was processed using MRA Enter method. The results were compared with the main MRA result to check if the data can be generalized.

**Results**

Out of 106 respondents, sixty (57%) were females, forty-three (41%) were males and three (3) respondents left this question blank. Forty-two percent came from Batch 2014 (Table 1). Eleven (11) respondents did not indicate when they graduated.

Table 1
*Number of Respondents per Batch*

| Batch Number | Number of Respondents | Percentage (%) |
|---|---|---|
| 2010 | 5 | 4.72 |
| 2011 | 7 | 6.60 |
| 2012 | 8 | 7.55 |
| 2013 | 18 | 16.98 |
| 2014 | 45 | 42.45 |
| 2015 | 12 | 11.32 |
| BLANK | 11 | 10.38 |
| TOTAL | 106 | 100.00 |

Table 2 shows that 89 respondents were 18 to 25 years old, ten were 26 to 30, and two were above 30 years old. Five (5) respondents left this portion blank.

Table 2
*Age of Respondents*

| Age Range | Number of Respondents | Percentage (%) |
|---|---|---|
| 18 to 22 years old | 40 | 37.74 |
| 23 to 25 years old | 49 | 46.23 |
| 26 to 30 years old | 10 | 9.43 |
| Above 30 years old | 2 | 1.89 |
| BLANK | 5 | 4.72 |
| TOTAL | 106 | 100.00 |

A total of 85.85% were involved in business either as sole owner, manager or part-owner (Table 3).

Table 3
*Business Engagement*

| Business Engagement | Number of Respondents | Percentage (%) | Total Percentage (%) |
|---|---|---|---|
| Sole owner of a business | 20 | 18.87 | 85.85 |
| Managing their family business | 32 | 30.19 | |
| Part-owner of a business but not involved in the operations of the business | 19 | 17.92 | |
| Employed and in business at the same time | 20 | 18.87 | |
| Others | 14 | 13.21 | 14.15 |
| BLANK | 1 | 0.94 | |
| TOTAL | 106 | 100.00 | 100.00 |

Fourteen indicated that they were not engaged in business at the moment. Out of these fourteen respondents, thirteen of them were either employed or pursuing further education in preparation for their next business start-up. One was recovering from surgery but will soon help manage their family business (Table 4).

Table 4
*Plans of the 14 Respondents Currently Not in Business*

| Business Plans | Number of Respondents |
|---|---|
| Employed and presently working on start-up business within the year | 10 |
| Studying but working on start-up business within this year | 3 |
| On sick leave but was helping family business prior to surgery | 1 |

More than 65% of those engaged in business get their monthly salary while 19.81% had not received any (Table 5). A respondent indicated that it was her mother who manages the finances. Eleven (11) respondents left this question unanswered.

Table 5
*Compensation from Business*

| Category Description | Number of Respondents | Percentage (%) | Total Percentage (%) |
|---|---|---|---|
| has not paid my salary, so far | 21 | 19.81 | 19.81 |
| given me salary for the past 3 - 24 months | 48 | 45.28 | 68.87 |
| given me salary for the past 25 - 42 months | 17 | 16.04 | |
| given me salary for more than 42 months | 8 | 7.55 | |
| others | 1 | 0.94 | 0.94 |
| BLANK | 11 | 10.38 | 10.38 |
| TOTAL | 106 | 100.00 | 100.00 |

Fifty-six respondents (52.83%) started their businesses in College or right after graduation (Table 6) while at total of thirty-six respondents (33.96%) started years after. The three respondents indicated that they were in business for less than a year.

Table 6
*Years in Business*

| Category | Number of Respondents | Percentage (%) |
|---|---|---|
| Since College or right after graduation | 56 | 52.83 |
| 1 – 2 years after graduation | 29 | 27.36 |
| 3 – 5 years after graduation | 7 | 6.60 |
| More than 5 years after graduation | 1 | 0.94 |
| Others | 3 | 2.83 |
| BLANK | 10 | 9.43 |
| TOTAL | 106 | 100.00 |

Table 7 shows that 36.79% of the respondents engaged in business to generate jobs, 40.57% to develop new products or service and 20.75% to develop new processes. Only 14.15% were interested to enter the international market.

Table 7
*Motivating Factors for Engaging in Business*

| Motivating Factor | Number of Respondents | Percentage (%) |
|---|---|---|
| To generate jobs | 39 | 36.79 |
| To develop a new product or service | 43 | 40.57 |
| To enter the international market | 15 | 14.15 |
| To develop a new process | 22 | 20.75 |
| Others | 4 | 3.77 |
| BLANK | 16 | 15.09 |

Seventy-seven of the respondents (Table 8) experienced failure in business. The 29 respondents who indicated that they did not experience failure in business were mostly involved in established family-owned businesses.

Table 8
*Failed Business Ventures*

| Number of Failed Businesses | Number of Respondents | Percentage (%) |
|---|---|---|
| Never | 29 | 27.36 |
| Once | 60 | 56.60 |
| 2 – 3 times | 17 | 16.04 |
| more than 3 times already | 0 | 0.00 |
| BLANK | 0 | 0.00 |
| TOTAL | 106 | 100.00 |

Table 9 shows that fifty-four respondents (70.13%) indicated that their failed business occurred during the first few months from start-up while twenty-one respondents (27.27%) indicated that their failed businesses occurred a year or two after start-up.

Table 9
*Time Frame of Failed Business from Start-up*

| Time Frame | Number of Respondents | Percentage (%) |
|---|---|---|
| less than a year | 54 | 70.13 |
| 1 – 2 years | 21 | 27.27 |
| 3 – 5 years | 1 | 1.30 |
| more than 5 years | 1 | 1.30 |
| TOTAL | 77 | 100.00 |

Lack of financial resources, lack of business know-how, lack of profitability, lack of market acceptability and personal (including family concerns) were listed as the Top Five reasons for business failure (Table 10).

Table 10
*Reasons for Business Failure*

| Reason | Number of Respondents | Percentage (%) |
|---|---|---|
| Lack of financial resources | 34 | 44.16 |
| Lack of business know-how | 34 | 44.16 |
| Lack of business profitability | 32 | 41.56 |
| Lack of market acceptability | 26 | 33.77 |
| Personal (including family concerns) | 24 | 31.17 |
| Insufficient financial control | 23 | 29.87 |
| Lack of quality suppliers | 13 | 16.88 |
| Lack of qualified labor force | 6 | 7.79 |
| Others | 6 | 7.79 |

The Kolmogorov-Smirnov and Shapiro-Wilk tests on standardized residuals were performed to determine normality. The results showed (Table 11) that the p values of 0.200 and 0.180 for the Kolmogorov-Smirnov and Shapiro-Wilk tests, respectively, were not significant. Since these values were greater than 0.05, the null hypothesis that corresponds to a normal distribution of the variable was accepted.

Table 11
*Tests of Normality*

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Standardized Residual | .068 | 106 | .200* | .983 | 106 | .180 |

* This is a lower bound of the true significance.
a. Lilliefors Significance Correction

A close fit between the dotted line and the 45-degree curve (Figure 3) was observed suggesting normality (Janssens et al., 2008). The histogram for the dependent variable (Figure 4) also manifested no normality problem. Thus, the data passed the normality tests.

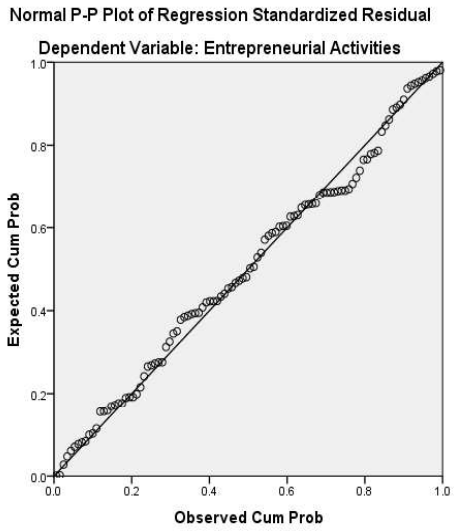


*Figure 3.* Normal P-Plot for Entrepreneurial Activities

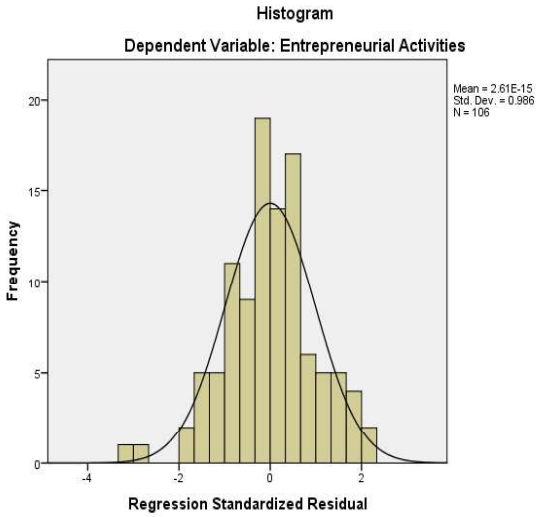


*Figure 4.* Histogram for Entrepreneurial Activities

On Homoscedasticity Test, the ZPRED(X) and ZRESID(Y) were measured on the scatterplot to test the presence of a pattern. Since the graph did not show a pattern, all relevant variables in Model 1 (Figure 5) were determined parts of the model.

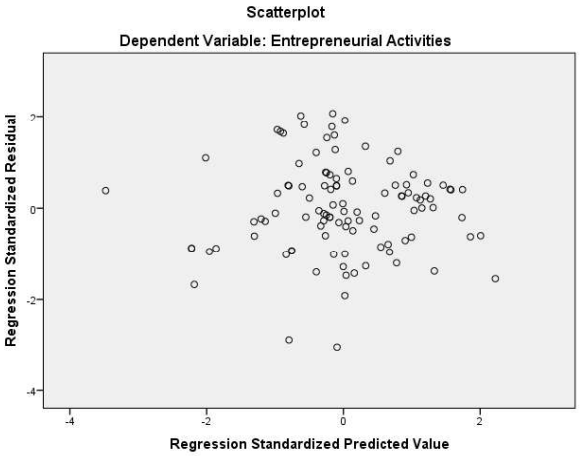


*Figure 5.* Scatterplot of Entrepreneurial Activities

A simple test to check if there were at least five times as many observations per parameter for sufficiency of observations (4 parameters x 5 = 20) was determined to be satisfied since there were 106 respondents. The coefficient of determination ($R^2$) for Model 1 was 0.441 (Table 12). Its ANOVA (Table 13) shows an F value of 26.837 (p-value =.000) which meant that all the independent variables used together as a set was significantly related to the dependent variable.

Table 12
*Model Summary*[b]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| 1 | .664[a] | .441 | .425 | .435532093060264 | .441 | 26.837 | 3 | 102 | .000 | 1.668 |

a. Predictors: (Constant), Environmental Factors, BS in Entrepreneurship Education, Societal Enhancers
b. Dependent Variable: Entrepreneurial Activities

Table 13
*ANOVA*[a]

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 15.272 | 3 | 5.091 | 26.837 | .000[b] |
| | Residual | 19.348 | 102 | .190 | | |
| | Total | 34.620 | 105 | | | |

a. Dependent Variable: Entrepreneurial Activities
b. Predictors: (Constant), Environmental Factors, BS in Entrepreneurship Education, Societal Enhancers

The regression model established (Table 14) was: Entrepreneurial Activities = 1.014 + 0.753 Societal Enhancers. This model implies that for each unit of increase in the perception of young entrepreneurs towards Societal Enhancers, there is a corresponding 0.753 increase in entrepreneurial activities. This meant that Societal Enhancers in the form of Social & Cultural

Norms, Aspirations of the respondents and Technological Readiness of the society were perceived to influence entrepreneurial activities in Davao Region.

Table 14
*Coefficients*

| Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|
| B | Std. Error | Beta | | |
| 1.014 | .373 | | 2.716 | .008 |
| -.009 | .067 | -.011 | -.135 | .893 |
| .753 | .108 | .627 | 6.952 | .000 |
| .055 | .076 | .068 | .724 | .471 |

a. Dependent Variable: Entrepreneurial Activities

Table 15 shows that there were no Variance Inflation Factors (VIF) greater than 5 that could indicate a strong presence of collinearity. The highest VIF for the model was 1.612 and all tolerance levels show values greater than 0.50. Tolerance values of 0.50 or less would be indicative of a multicollinearity issue (Janssens, Wijnen, Pelsmacker, & Kenhove, 2008). Thus, the researcher could say that there was no multicollinearity issue for the Model.

Table 15
*Collinearity Statistics*

| Model | | Correlations | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|
| | | Zero-order | Partial | Part | Tolerance | VIF |
| 1 | (Constant) | | | | | |
| | BS in Entrepreneurship Education | .222 | -.013 | -.010 | .812 | 1.231 |
| | Societal Enhancers | .662 | .567 | .515 | .673 | 1.486 |
| | Environmental Factors | .417 | .071 | .054 | .620 | 1.612 |

The data was split into two using research randomizer software and each was processed using MRA enter method. The data for Split Sample 1 and Split Sample 2 when compared with the Main Sample were not vastly different (Table 16). Thus, data can be generalized.

Table 16
*Comparison of Samples*

| Model Component | Main Sample (n=106) | Split Sample 1 (n=53) | Split Sample 2 (n=53) |
|---|---|---|---|
| Model 1 (using Enter Method) | | | |
| $R^2$ | .441 | .432 | .483 |
| Adjusted $R^2$ | .425 | .398 | .451 |
| Standard error of the estimate | .435532 | .463315 | .406204 |
| BS in Entrepreneurship Education: independent variable | | | |
| Beta Coefficient | Not entered | Not entered | Not entered |
| T Value | | | |
| P Value | | | |
| Social Enhancers: independent variable | | | |
| Beta Coefficient | .753 | .692 | .810 |
| T Value | 6.952 | 4.497 | 5.240 |
| P Value | .000 | .000 | .000 |
| Environmental Factors: independent variable | | | |
| Beta Coefficient | | | |
| T Value | Not entered | Not entered | Not entered |
| P Value | | | |

Table 17 was used as a guide in the interpretation of the correlation coefficients (Mukaka, 2012). Correlation (Table 18) between independent variables, and between independent and dependent variables were performed. The results show that the independent variables had either low positive or moderate positive correlation with each other. On the other hand, the correlation coefficients between independent and dependent variables show that variables were either negligible, low positive or moderate positive.

Table 17
*Guidelines for the Interpretation of Correlation Coefficients (Mukaka, 2012)*

| Correlation Coefficient | Interpretation |
|---|---|
| .90 to 1.00 (−.90 to −1.00) | Very high positive (negative) correlation |
| .70 to .90 (−.70 to −.90) | High positive (negative) correlation |
| .50 to .70 (−.50 to −.70) | Moderate positive (negative) correlation |
| .30 to .50 (−.30 to −.50) | Low positive (negative) correlation |
| .00 to .30 (.00 to −.30) | negligible correlation |

Table 18
*Correlation*

| Correlation between Independent Variables | Remarks |
|---|---|
| 1. B.S. in Entrepreneurship Education had low positive correlation with Environmental Factors (.420, p value .000) and Societal Enhancers (.326, p value .000) | Null Hypothesis rejected |
| 2. Societal Enhancers had moderate positive correlation with Environmental Factors (.563, p value .000). | Null Hypothesis rejected |
| **Correlation between Independent and Dependent Variables** | **Remarks** |
| 1. Entrepreneurial Activities was moderately correlated with Social enhancers (.662, p value .000), weakly correlated with Environmental Factors (.417, p value .000), and very weakly correlated with B.S. in Entrepreneurship Education (.222, p value .011) | Null Hypothesis rejected |

**Discussion**

The independent variable Societal Enhancers with indicators Social & Cultural Norms, Aspirations, and Technological Readiness was found to be significant in increasing the dependent variable, Entrepreneurial Activities.

Social and cultural norms as set by the family, friends, and media were perceived to be important in promoting the acceptability of entrepreneurship as a lifegoal. This finding is in support of the study on culture (Banzuela-de Ocampo, Bagano, & Tan, 2012) on Filipino-Chinese citizens and on entrepreneurs of Indian descent (Mallya, 2011) where it showed the important role of culture in the promotion of entrepreneurship. This was further supported by the study on the Entrepreneurship graduates of St. Paul University in Manila (Bignotia, 2014) which established that the majority of the graduates found the lack of family support as inhibitor. This sentiment was similarly reflected by 31% of the research respondents who identified personal problems including family concerns as one of the reasons for business failure (Refer to Table 10).

Aspirations were similarly perceived as motivating factors of entrepreneurship in terms of work-life balance, providing employment, creating products and competing in the global market. The significance of aspirations could be related to the case study about Sikap Buhay (Pascual, 2008) which accounted its success to the self-confidence gained by the women to the support that family members gave them.

Technological Readiness measured in terms of supply of skilled labor, training on technological developments, and collaboration on researches was related to the aspiration to go into business for product development or new processes (Table 7). The perceived importance of Technological Readiness was in accordance with the respondents' answer on the lack of quality suppliers, labor force and market acceptability as reasons behind business failure (Table 10). Similar to the study "Entrepreneurial Intentions among Entrepreneurial Management Students" (Magsino & Opulencia, 2015), the respondents considered lack of capital as the most general business challenge and recommended incorporating into the education system the participation of government in providing information regarding developments on this area.

The MRA resulted into a model that showed that all the independent variables, BS in Entrepreneurship Education, Societal Enhancers and Environmental Factors, used together in this model as a set, were significantly related to the dependent variable, Entrepreneurial Activities. Overall, the model's coefficient of determination ($R^2$) of 0.441, showed that though the independent variable Societal Enhancers lacked the predictive power on the dependent variable, the results show that it could explain its positive influence on Entrepreneurial Activities in terms of the number of jobs, the promotion of innovation and the competencies of entrepreneurship graduates. It might not have a good practical significance because of its low explanatory value, still, the model accounted for 44.1% of the variances. In the field of Social Science, similar numbers could have important implications and, thus, the model should not be discarded.

This research established that there was a significant relationship between the three independent variables - BS in Entrepreneurship Education, Societal Enhancers, and Environmental Factors and the dependent variable Entrepreneurial Activities. And that Societal Enhancers significantly influence Entrepreneurial Activities, These have established sufficient reasons not to accept the two null hypotheses.

## Conclusion

Entrepreneurs like Brijmohan Lal Munjal invested in family and community members to build his company, the Hero Group. G.D. Birla established the Birla Brothers Ltd. armed with generations of business traditions. These are examples that can show that the entrepreneur's motivation stems out of encouragement from family members, the circle of friends, and support from the government including the media. This research sufficiently showed that the indicators of entrepreneurial activities were functions of how sectors of society view entrepreneurship in general. This can indicate why innovative ideas and competency development could still emerge even with weak financial and commercial infrastructures. And that a breeding ground for creative ideas can possibly emerge from encouragements from social cliques, urging aspirations not only to dream but to transform ideas into realities. This can explain how successful entrepreneurs armed only with the burning aspiration to making their vision a reality can excel even without formal training in entrepreneurship education.

The Philippines can capitalize on the fact that it got the highest score in the promotion of entrepreneurial education in comparison to other ASEAN countries (ERIA & OECD, 2014). If Entrepreneurship education in the Philippines is expected to breed future economic movers, the learning environment should involve all stakeholders – teachers, school administrators, government including the students' parents, to be dynamic participants to the attainment of program objectives. More in-depth study may even come up with a basis for the academe to call for integration of entrepreneurship starting from Basic Education (Xavier, Guelich, Kew, Nawangpalupi, & Velasco, 2015). The case study conducted by Dela Salle University (Aure, Alonday, Kang & Mapue, 2013) can be replicated as it dwelt primarily on the importance of motivation building as anchor towards sustainability of entrepreneurial endeavors.

This research has established that social and cultural norms are enablers of entrepreneurship especially in instilling the worthy aspirations to the youth. This research implies that BS in Entrepreneurship course program can be the springboard where personal attitude,

capabilities, values, and character (Gatchalian & Lopez, 2013) are built through social support. This research offered an insight behind the cultural value of family business owners allowing their children to play in the workplace to develop the attitude, interest, and motivation towards entrepreneurship. Succession programs of family enterprises can focus on instilling the right social and entrepreneurial values to family members from childhood. Furthermore, media can be used to help inspire young entrepreneurs for their innovative and opportunistic ventures. Although the research did not strongly establish the predictive power of Societal Enhancers in creating jobs, increasing innovation and improving competencies, still the research was successful in pointing out the important role of these enhancers in establishing a conducive entrepreneurial atmosphere within the Region. This research showed that a conducive environment of support spells the attainment of an entrepreneurial mindset.

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