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**Towards a coherent picture on entrepreneurial venture growth; A study based on Sri Lankan small and medium entrepreneurs**

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**ABSTRACT**

Entrepreneurial venture growth is a multi dimensional concept. Growth can be acquired either by internally or externally stimulated factors. Since the literature relating to both internal and external stimulations relates to venture growth and it is rare in execution, it has been empirically verified that leadership, cognitive and culture may act internally and externally stimulated factors or hindering factors relating to the context of entrepreneurial venture growth. Therefore these facts have identified as a gap in the research field to be filled through the execution of the study. The research had demonstrated to empirically examine the interaction between the two extensions of inside and outside factors affecting for the entrepreneurial venture growth. As per the internal quadrant the main constructs are leadership and cognition factors and external quadrant is represented by national cultural factors. Unit of analysis is small and medium entrepreneurs registered under Regional Offices at Regional Development Division of Industrial Development Board, Ministry of Industry and Commerce, Sri Lanka. Research data findings had demonstrated with a sample size of 170 small and medium entrepreneurs using an interviewer administrated structured questionnaire. In this case, the data were analysed by using Analysis Moment of Structural (AMOS) 20 and research hypotheses were assessed using structural equation modeling. The results of this research could encourage the future researchers on the nexus of identification of entrepreneurial behavior in established firms embedded in organizational routines.

**Keywords** – Entrepreneurship, Venture growth, leadership, cognition, motivation, national culture, Sri Lanka

**1. Introduction**

Venture growth can be acquired either by organic or inorganic way. Organic growth refers to the true growth for the core of the company. It is a good indicator of how well management used its internal resources to expand profits. Inorganic growth strategies refer to external growth by takeovers, mergers and acquisitions. It is fast and allows immediate utilization of acquired assets (Bruner, 2004). Therefore inorganic growth entirely linked with external factors in their value expansion. Oluseyi, Olalekan, Margaret , Gloria, & Oyedele, (2014), the Executive Secretary, Institute of Entrepreneurs, Nigeria in his presentation at the recently concluded 3rd South West Regional Micro SMEs Forum asserted that the small and medium enterprises (SMEs) sector has not been performing well in the recent times. This has resulted into lower tendencies in venture growth.

According to the statistics of Global Entrepreneurial Index (GEI) 2015, Sri Lanka world rank is 71 of 130 and regional rank is 11 of 21. As data demonstrates, low ranks show the outcomes of entrepreneur's low tendency in engaging with high productive business activities (Autio, Acs, & Szerb, 2015). Entrepreneurial success has been well investigated and remains a major concern to researchers in many nations. As Mr. Abeygunasekara, the current executive director of Lakshman Kadirgamar Institute of International Relations and Strategic Studies (LKIRSS), at the world entrepreneurship forum in 2013, said that the end of the war has provided Sri Lanka a massive opportunity to drive its way forward and also by way of having the security of the country improved that there is conducive environment for the entrepreneurs to invest and start business. People who suffered from the war are finding their own way of living and most of them are willing to become entrepreneurs. Therefore the existing conditions have provided a new platform for new Sri Lankan entrepreneurs.

As mentioned previously the area of venture growth is an important topic for scholarly inquiry. Through the execution of the research study, it intends to explore new literature on entrepreneurial venture growth by combining the two aspects of internal (Entrepreneurial leadership, cognitive) and external (national cultural aspect). Further the study illustrates on the critical success factors (CSFs) affecting for entrepreneurial venture growth by addressing the main research problem, "what role do internal (leadership and cognitive) and external (national culture) factors play in achieving entrepreneurial venture growth?". Therefore these factors have been identified as a gap in the research field and the researcher suppose to fill this gap to a certain extent by executing this research study.

## **2. Literature review**

Many of the research articles proven that, entrepreneurship and growth are concepts that coexist and are dependent on each other (Stevenson & Jarillo, 1990). Venture growth can effect from many sources. Growth can be measured through the indicators of employees, sales and equity. Employee growth demonstrated moderate to high concurrent validity across its absolute and relative measures (Shepherd & Wiklund, 2009). Growth can identify as a heterogeneous concept. Therefore many literature sources reveal that the way growth is measured may vary greatly.

In entrepreneurial venture growth, one measure is universally considered as the best conceptualization of success and that measure is sales growth (Achtenagen, Naldi, & Melin, 2010). In entrepreneurship research, the two most common measures of growth are sales and employment (Shepherd & Wiklund, 2009). Evidence of concurrent validity for absolute sales growth and absolute employee growth has important implications for further research (Shepherd & Wiklund, 2009). According to Chandler, McKelvie, & Davidsson, (2009) stated that, comparatively sales growth as the most common indicator of growth, and employment growth also a frequently used variable. According to the above findings it can conclude that, the relative measures of employee growth contribute to high effect on venture growth by their capability of accumulating new knowledge over time. Moreover, it has been claimed that multiple growth indicators give richer information, and thus, are better than single indicators (Birley & Westhead, 1990). As for the convenience in demonstrating the study, the researcher has chosen three indicators namely, sales, employees and equity to measure the dependent variable of growth.

## **2.1 Internal factors affecting for venture growth**

### **2.1.1 Leadership factors and venture growth**

Entrepreneurship and leadership can identify as two disciplines that focused on personality traits and demographic characteristics that can lead to differentiate both entrepreneurs and leaders from each other. Subsequently, these disciplines concentrated on the requisite behavioral traits that entrepreneurs and leaders must possess so as to enhance their capability to successfully motivate workers to achieve a defined vision (Agbim K. , 2013). As entrepreneurship and leadership are two concepts, they have been integrated by many researchers into a new paradigm known as "Entrepreneurial Leadership" and simultaneously utilize corporate entrepreneurship and leadership as two new fields of research called entrepreneurial leadership (Hejazi , Maleki, & Naeiji, 2012). In terms of leadership measurement scale, Hejazi et al. (2012), suggested the four main sets of factors including strategic, communicative, personal and motivational factors as a new entrepreneurial leadership by combining three theories including transformational leadership, team oriented leadership and value oriented leadership theories and utilizing experts perspectives.

### **2.1.2 Cognitive factors and venture growth**

Cognitive factors may significantly affect for entrepreneurial venture growth (Shepherd & Wiklund, 2009). Therefore there is a greater need to understand the processes that underlie entrepreneurial venture growth. Particularly, it is essential to know about how the entrepreneur's cognitive processes could shape growth (Baron R. , 2004). Cognitive approach uses cognitive aspects of entrepreneurs to identify and explain about their behavior in relates to capturing opportunities for the creation of business growth (Sanchez, Carballo, & Gutierrez, 2011). Building on the entrepreneurial action as per the perspective of Shepherd & Wiklund, (2009) they have signified the importance of cognition as action oriented, embodied, situated, and distributed, which can offer rich implications for understanding recovery and learning from failure.

Specifically, through the cognitive aspect of the study, the researcher intends to investigate on entrepreneurs' attribution of the cause of failure, their aspiration for future startups while overcoming the failure and the impact of the motivations for future entrepreneurship towards venture growth. Throughout the study, researcher critically analyze the impact of the determinants of cognitive factors on venture growth considering the dimensions of risk perception, counter factual thinking, susceptibility to cognitive bias and processing style.

## **2.2 External factors affecting for venture growth**

### **2.2.1 National culture and venture growth**

Cultural awareness can lead to greater success of entrepreneurial venture growth and on the other hand having less consideration on cultural aspects can lead to their failure. Geert Hofstede is a renowned author who developed a model to describe aspects of national culture by characterizing its various cultural 'dimensions'. Geert Hofstede's model was based on a research study on IBM employees involving over fifty countries. He introduced five dimensions or problem areas to represent differences among national cultures (Hofstede G. , 1997). They are namely, power distance, uncertainty avoidance, individualism vs

collectivism, masculinity vs femininity and long-term orientation. Since the national culture acts as a mediating factor in relation to the venture growth the researcher intends to test the sub hypothesis considering the dimensions identified under national culture as independent variables. Therefore, for the easiness of the elastration purposes, those hypothesizes are constructed and being analyzed considering in what extent the dimensions are directly affects for venture growth while considering each of the dimensions as independent variables of the study.

### **2.3 High power distance culture and venture growth**

When considering about the concept of culture, organizational structures having less power distance acknowledge individual's personal ability of making decisions and on the other hand, organizations with high power distance do not accept individual's ability in making decisions (Hofstede G. , 2001). This implies the fact that organizational settings with less power distance often associates with the concepts of decentralization, less structured rules and regulations high degree of sharing information and authority. This further explains the way in which power is distributed and the extent to which the less powerful accept that power is distributed unequally. Put simply, people in some cultures accept a higher degree of unequally distributed power than do people in other cultures (Hofstede G. , 2001). Many researches done in investigating the relationship between power distance and culture prove that, there is a negative relationship between power distance as a dimension of culture (independent variable) towards performance or the growth (dependent variable) of the venture. In other words, that the power distance and performance vary in opposite direction. As power distance increases, performance decreases and vice versa. Accordingly power distance defines how social inequality is perceived and accepted in different cultures (Hofstede & Bond, 1984).

#### **2.3.1 Uncertainty avoidance culture and venture growth**

From the perspective of an individual entrepreneur initiating a new venture is highly associated with uncertainty than taking over an already established firm. As of Hofstede, (1981) elaborates uncertainty avoidance as nation's tolerance over uncertainty and ambiguity. According to Hofstede's illustration, the level of uncertainty avoidance indicates the extent to which individuals feel free or uncomfortable in unstructured or unfamiliar situations in an organizational context. As a result people in uncertainty avoiding countries aim to minimize the impact and the possibility of occurrence of such unstructured situations through the use of imposing strict rules and regulations and even bureaucracy. Moreover, as nations having high uncertainty avoiding cultures attempt to avoid unstructured situations through detailed planning and tend to prefer order and certainty since they could impose stability for the organization. In contrast, nations having low uncertainty avoidance culture, people tend to accept unstructured situation without looking forward to minimize the uncertainty of such particular situations. Furthermore according to Hofstede, (2001) nations having low uncertainty scenarios individuals are less resistance to change. And furthermore, when high uncertainty hinders the performance of a venture (Saeed , Yousafzai, & Engelen, 2014) and at the same time low uncertainty cultures could experience more competitive advantage through increasing venture growth.

#### **2.3.2 Individualistic culture and venture growth**

When considering at gaining organizational efficiency and success to maintain stability within the turbulent environment, it is essential to predict the potential contribution made by the organizational culture. In that case, the dimension of individualism vs collectivism which was introduced by Geert Hofstede, (1981) in his extensive cross-cultural study would significantly illustrate on individual's preference over formulating groups in achieving higher venture growth. Hofstede, (1981) describes the concept of individualism as the degree to which the involvements of individuals are integrated into groups. Therefore in individualistic countries the ties formulated between individuals are not strong and they are more concerned on themselves. Particularly they are more entitled with accomplishing their own personal goals while targeting at reaching the highest level of self-actualization. By contrast, in collectivistic culture, individuals are integrated into strong, cohesive groups and such culture may facilitate the ability to cope with a new situations. In other words, collectiveness values held by a group of people may either support or obstruct organizational efforts to bring these people together in order to pursue certain goals (Maaja, Juri, & Anu, 2002).

Accordingly the concept of individualism is an attitude that identifies the importance of an individual over the group identity and comparatively collectivism is the opposite tendency that emphasizes the importance of group identity over individual identity (Triandis, 1995). After considering above mentioned reasoning the researcher intends to critically analyze the impact of both the individualism and collectivism over the growth of entrepreneurial ventures. Supportively, Saeed, et al., (2014) affirm that group collaboration is much more influential over venture success than in emphasizing more on individual identity.

#### **2.4 Masculine culture and venture growth**

Hofstede, (1981) had identified culture according to a broader aspect that having important consequences for the functionality of many societies. At the theory formulation in relation to the dimension of masculinity vs femininity, Hofstede's explanation on this regard is very much significant in relation to the role patterns identified in the society. As of the Hofstede's explanation, masculinity captures the extent to which the dominant values in a country are masculine and emphasize assertiveness, the acquisition of money and possessions, and the lack of concern for others, the quality of life, or people. In more masculine societies, people value challenges and recognition and strive for advancement and earnings while pretending for be more ego oriented (Arrindell, Eisemann, & Richter, 2003). On the other hand, feminine society's cooperation between individuals, building up trust and relationships at the working context and employment security play important roles and most importantly they are more relationship oriented (Hofstede G. , 2003). Further in Hofstede's view on masculinity and femininity refers to the dominant role pattern identified in the society that the male assertiveness and female nurturance. As of another aspect, cultures labeled as masculine strive for men to be assertive, ambitious and competitive, to strive for material success while respecting whatever is big, strong, and fast. On the other hand, feminine cultures have defined as cultures relatively overlapping social roles (Hofstede G. , 2001). Therefore as of these explanations the researcher postulate that while high level of assertiveness may hinder or negatively affect for the firm's performance, lower level of assertiveness may positively influence over growth aspects of a firm (Arrindell, Eisemann, & Richter, 2003).

#### **2.5 Long term oriented culture and venture growth**

As of Hofstede's (1981) elaboration, long term orientation describes a culture's orientation to the future. It emphasizes more on values including persistence, perseverance towards slow

results and honoring ancestors and parents. In contrast, short term orientation is directed to the orientation of past and the present. It emphasizes more on individual's expectance towards quick or instant results of a decision and personal steadiness (Hofstede & Bond, 1988). Accordingly, both the aspects of long term versus short term orientation, related to the extent of effort of individuals towards achieving high performance through focusing only on the future or the present and past. Long term oriented cultures are more likely to go with strategies like takeovers rather than investing on starting up new ventures (Block & Walter, 2001). Such long term oriented cultures are more comfortable with savings and a frugal use of resources. Therefore as a result of adopting for such a long term oriented culture, individuals are facilitated to save a larger portion of income it could be thrifty (Hofstede G. , 2003). Therefore, having a long term oriented culture reduces the perceived risk of wasting resources. On the other hand, Lumpkin , Brigham, & Moss, (2010) argue that long term orientation may influence the business owners for engaging in high risk projects that might even negatively affect for the firm's financial position. Therefore long-term orientation can be associated with conservative decision making that leads individuals in taking decisions in long term oriented societies (Block & Walter, 2001).

Therefore as of the above elastration of the two aspects of long term and short term orientations, it can conclude that, the short term orientation are the most important events in that occurred in the past or take place now. It could also result in slow or no economic growth for initiating startup entrepreneurs. When considering about the long term orientation it identifies the events occurring in the future and it leads for fast economic growth while having high level of prosperity.

### **3. Research questions**

To investigate on above mentioned research problem following are the formulated research questions which are going to address through the study.

1. What is the impact of leadership factors on venture growth?
2. What is the impact of cognition factors on venture growth?
3. What is the relationship of national culture and venture growth?

#### **3.1 Research objectives**

Based on the above research questions following are the research objectives going to be achieved through the analysis.

1. To identify the impact of leadership factors on venture growth
2. To identify the impact of cognitive factors on venture growth
3. To determine the impact of high power distance culture on venture growth
4. To determine the impact of low uncertainty avoidance culture on venture growth
5. To determine the impact of individualistic culture on venture growth
6. To determine the impact of masculine culture on venture growth
7. To determine the impact of long term oriented culture on venture growth

#### **3.2 Research Hypothesizes**

Hypothesis 1 (H1): Entrepreneurial leadership positively impact on venture growth

Hypothesis 2 (H2): Entrepreneurial cognition positively impact on venture growth

Hypothesis 3a (H3a): High power distance culture negatively impact on venture growth

Hypothesis 3b (H3b): High uncertainty avoidance culture positively impact on venture growth

Hypothesis 3c (H3c): Individual cultures negatively impact over venture growth

Hypothesis 3d (H3d): Low masculine cultures positively impact over venture growth

Hypothesis 3e (H3e): Long term oriented cultures positively impact on venture growth

#### **4. Research methodology**

The final outcome of the research study is to construct a detailed analysis of inside and outside factors affecting for entrepreneurial venture growth. As per the main constructs entrepreneurial leadership was extracted by the work of Hejazi et al. (2012) with four dimensional frameworks including strategic, communicative, personal and motivational factors and entrepreneurial cognition is assessed based on four theoretical framework constructed by Baron, (2004) including counterfactual thinking, contrasting perception of risk, processing style and susceptibility to cognitive bias. National culture as the next variable has formulated based on the Greet Hofstede's 1981 national cultural dimensions and they are, power distance, uncertainty avoidance, individualism, masculinity and long term orientation. Adhering to Wiklund, Patzelt, & Shepherd, (2009), Davidsson, Delmar, & Wiklund, (2006) and Shepherd & Wiklund, (2009) the researcher has assessed growth utilizing the indicators of sales, number of employees and equity in order to measure venture growth aspects. Utilizing these three indicators, entrepreneurs were asked to rate their sales, equity and employment growth compared to major competitors in a 7-point likert scale. Furthermore path analysis models were employed with directional relationships for the purpose of statistically measure the relationship between the variables of the study.

##### **4.1 Internal factors: entrepreneurial leadership factors**

As Schulz & Hofer, (1999) described entrepreneurial leadership can identify as gaining competitive advantage through value creation based on newly discovered opportunities and strategies. According to the above definition the communication and conceptual skills to recognize the complexities in the environment are highly significant to identify the entrepreneurial leadership. And entrepreneurial leadership also includes other required abilities for constant value creation of managers aligning with company goals. Entrepreneurial leadership the first construct was derived from the work of Hejazi et al. (2012) with strategic, motivational, communicative, and personal factors as its dimensions.

##### **4.2 Internal factors: entrepreneurial cognition factors**

Entrepreneurial cognition factors can be describe as the knowledge structures that people use to make assessments, judgments or decisions involving opportunity evaluation and venture creation and growth (Mitchell, Busenitz, McMullen, Bird, & Gablio, 2007). Therefore cognitive perspective can identify as a valuable tool for the field of entrepreneurship which can be contribute to the field's scientific understanding of the entrepreneurial process and to practical efforts to assist entrepreneurs in their efforts to start new ventures. Furthermore, cognitive success items of the study was derived from the work of Baron (2004) including the dimensions of risk perception (Forlani & Mullins, 2000), counter factual thinking (Baron, 1999), susceptibility to cognitive bias (Scheier, Carver, & Bridges, 1994) and processing style (MindTools, 2012).

### **4.3 External factors: national cultural factors**

Professor Geert Hofstede defines national culture as the collective programming of the human mind that distinguishes one group or category of people from another. In other words, that's what members of a group have in common and also what they distinguish themselves from other groups (Dissanayake & Semasinghe, 2014). Further Hofstede, (1981) in his analysis of culture described a set of features that influence people reactions to its environment and thus differentiates group membership. They are namely, power distance, uncertainty avoidance, individualism verses collectivism, masculinity verses femininity and long term verses short term. These have been identified as the variables under the construct of national culture and this was derived using Hofstede's model of national cultural dimensions.

### **4.4 Power distance index (PDI)**

As of the study elaborated having a high power distance cultures indicates in what extent that the society accepts the fact that lower distance is positively attributable towards venture growth. Accordingly a pre formulated research questionnaire have formulated in measuring the PDI effect through categorizing the measurements into 5 point likert scale.

The index can be calculated as follows.

$$PDI = 35(m07 - m02) + 25(m20 - m23) + C(pd)$$

As of the index it depicts that the m07 is used the mean scores in relation to question number 7 and etc. As of the research findings, the output generated could be used for analyze the effectiveness of the construct while identifying PDI value variations occurred within the range of 0 and 100 depicting high and lower power distance values. And C(pd) is identified as a constant value which do not create any effect on comparison of samples.

### **4.5 Uncertainty avoidance index (UAI)**

This explains on how societies feel about the uncertain and ambiguous situations. They try to avoid the negativities creates by those situations by enhancing more flexible cultures in the working environment since low uncertainty avoidance cultures often facilitates individuals to feel free and come up with more creative and innovative ideas and the questionnaire measures the UAI by means of a 5 point likert scale. UAI index can be calculated as follows,

$$UAI = 40(m18 - m15) + 25(m21 - m24) + C(ua)$$

As of the equation, m18 is the mean value of question number 18 and etc. C(ua) is the constant value that varies along with the nature of the sample and it should also be noted that, the above constant variable do core varies along with the nature of the sample of the study and it does not affect the comparison of the samples. It is also said that value provided through running the index scores are lie in between 0 and 100.

### **4.6 Individualism index (IDV)**

As of this dimension describes, nations having oriented on individualistic cultures are highly recognized the independence of members while having weak ties in social relationships. The index can be calculated as follows,

$$IDV = 35(m04 - m01) + 35(m09 - m06) + C(ic)$$

In which m04 is the mean value of question number 4 and etc. The index score normally ranges from 0 to 100 implying high collective and individual cultures. And also the constant figure of C(ic) varies along with the nature of the sample and it doesn't effect on comparison of the sample.

#### **4.7 Masculinity index (MAS)**

As of masculine cultures people value more on challenges and recognition that used to strive more on advancement in the field of work. In other words "live to work" mentality is fostered in such cultures where as in feminine societies cooperation at work plays an important role and "work to live" spirit is enhanced in more relationship oriented cultures (Hofstede G., 2003). This aspect would measure via a five-point likert scale. The index can be calculated as follows,

$$MAS = 35(m05 - m03) + 35(m08 - m10) + C(mf)$$

According to Hofstede & Minkov, (2013) the index value ranging about 100 explaining that strongly feminine and strongly masculine cultures. As of the index it depicts that the m05 is used the mean scores in relation to question number 5 and etc. And also C(mf) is a constant value that varies along with the nature of the sample and it doesn't effect on comparison of the sample.

#### **4.8 Long term orientation index (LTO)**

Long-term orientation in the sense, it describes a culture's orientation towards future. Values including persistence, personal adaptability, thrift, and honoring ancestors and parents are significant aspects on LTO (Hofstede, 2011). The index can be calculated as follows,

$$LTO = 40(m13 - m14) + 25(m19 - m22) + C(Is)$$

As of the explanation done by Hofstede & Minkov (2013) on this regard, is that the LTO value could be in a range between 0 and 100. It is basically influence with the nature of the variables. As of the index it depicts that the m13 is used the mean scores in relation to question number 13 and etc. And also C(Is) is a constant value that varies along with the nature of the sample and it doesn't effect on comparison of the sample.

#### **4.9 Sampling method**

Research was conducted as a quantitative study. Data was collected using a study conducted as a sample survey since data was gathered using a sampling method and entire population was not been surveyed. Sampling method was a disproportional sampling method due to the sample drawn from the particular group of study is not proportionated to the relative size of the entire population. Therefore disproportional sampling allows giving a larger representation to one or more subgroups to avoid underrepresentation of the entire population.

#### **4.10 Data collection process of the study**

Questionnaire was used for data collection and it was constructed using pre-formulated written set of questions which respondents facilitates to record their answers with closely

defined alternatives. Required data was gathered in a way of personally administrated structured questionnaire. The questionnaire was constructed with questions covering mainly the sections of internal and external factors affecting for entrepreneurial venture growth. The population of the main study was identified as the entrepreneurs registered in different regional offices of the Regional Development Division in Industrial Development Board (IDB), Ministry of Industry and Commerce, Sri Lanka. Unit of analysis of the dissertation is a firm and the sample subject of the study identified as Small and Medium Entrepreneurs (SMEs) owner managers. Sampling frame of 170 small and medium entrepreneurs was identified for the study. And those entrepreneurs who represent several districts all over the country were specifically registered under IDB in 2014-2015. Researcher visited the industries and had several meetings with the Entrepreneur Promotion Managers (EPM) of entrepreneur counseling programs and the questionnaires were distributed during entrepreneurial meetings. Due to the personally administered questionnaires it facilitates researcher to reach a large number of potential respondents representing variety of regions having zero level of missing values of the study.

#### **4.11 Quality of data: internal consistency and reliability assessment**

In order to measure the reliability (Cronbach, 1951), the researcher has conducted an assessment of Cronbach alpha test in order to measure the fitness of the utilized scale items.

**Table 1: Cronbach Alpha Values of the Main Study**

Source: Research Data

Variable	Number of Items	Cronbach's Alpha
Cognition	21	0.796
Leadership	35	0.988
Culture	16	0.708
Growth Factors	3	0.843

This show the respondents were highly reliable as the Reliability Co-efficiency is closer to one. It implies that none of the scales require modifications as all scales correspond to above acceptable levels. Therefore it is notable that there are no any significant deviations of values beyond the acceptable levels specified.

### **5. Data analysis and discussion**

#### **5.1 Descriptive Statistics of the Sample**

Based on the main analysis results on demographic variables, gender contribution in entrepreneurial aspects from the selected territory poses some important observations. The study uses a nominal type of a variable to capture gender composition of the entire respondents.

**Table 2: Gender composition of the study**

Source: Research data

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	114	67.1	67.1	67.1
Female	56	32.9	32.9	100.0
Total	170	100.0	100.0	

As of the research findings, male entrepreneurs have dominated female entrepreneurs. Based on the data, male participants in entrepreneurial sectors are significant and at the mean time female involvement is also represent a considerable rate. Since female entrepreneurs engage with entrepreneurial establishments as a self-employment to generate revenue for their households, it can observe an increasing trend in woman participation in entrepreneurial aspects. Thus, with the challenges of demographic changes and aging population, the role of women in the labor force will become a key factor for sustainable high economic growth.

Considering the respondents years of formal education, majority of entrepreneurs represent thirteen years category under the levels of formal education. As of the statistics, the most common belief is that the education level and success of entrepreneurs have no direct stated relationship. Most of the time businesses fail due to lack of proficiency in the fields of accounting and financing. Based on the observational results, entrepreneurs who were identified as the research sample in the main study are considerably literate in managing accounting and financial activities in their businesses.

**Table 3:** Years of formal education

Source: Research data

	Frequency	Percent	Valid Percent	Cumulative Percent
10 years or less	4	2.4	2.4	2.4
11 years	15	8.8	8.8	11.2
12 years	9	5.3	5.3	16.5
13 years	52	30.6	30.6	47.1
14 years	30	17.6	17.6	64.7
15 years	22	12.9	12.9	77.6
16 years	12	7.1	7.1	84.7
17 years	12	7.1	7.1	91.8
18 years or over	14	8.2	8.2	100.0
Total	170	100.0	100.0	

The study doesn't specify a sector for the analysis because the researcher intends to demonstrate the research on considering a wide range of industrial sectors rather focusing on few sectors and narrowing down the study. In other words the study does not adhere for a homogeneous sample.

**Table 4:** Industry

Source: Research Data

	Frequency	Percent	Valid Percent	Cumulative Percent
Processing of Rubber, Tea, Coconuts, Tobacco and other agricultural commodities	10	5.9	5.9	5.9
Telecommunications	8	4.7	4.7	10.6
Banking	9	5.3	5.3	15.9
Clothing	18	10.6	10.6	26.5
Textiles	33	19.4	19.4	45.9
Cement	15	8.8	8.8	54.7
Information Technology	23	13.5	13.5	68.2

Services				
Construction	41	24.1	24.1	92.4
Other	13	7.6	7.6	100.0
Total	170	100.0	100.0	

It is notable that majority of entrepreneurs are involved in construction category and second most prominent sector represents the textiles industry. Most importantly it should affirm that the demographic variable of industrial type has been used only for descriptive purpose to illustrate the industrial category engaged by each of the entrepreneurs responded for the analysis.

## 5.2 Correlation analysis of the study

As of the research dataset extracted below, the area indicated in gray color shows the correlation of each of the independent variable of the study with relates to growth the dependent variable. According to the results all the independent variable of the main study except power distance shows Pearson Correlation values above 0.5 and closer to one. Considerably it indicates that there is a high strength between four out of five (excluding power distance) independent variables of the study with the dependent variable of growth. When considering about the power distance as a dimension of national cultural factors, in reality as of the Sri Lankan context, it indicates a relatively high power distance between superior and subordinate's relationship. Therefore as of the hypothesis development this has been got to consideration and the study used to test the hypothesis of having negative relationship between power distance cultures towards entrepreneurial venture growth.

On the other hand, in deciding the direction of linear relationships between pairs of continuous variables, other than the power distance, all the other correlation values represent positive figures compared with the dependent variable of growth. It can further interpret that the independent variable of power distance may influence negatively over the relationship creates on culture and venture growth. On the other hand positive relationships represents on all the independent variables including leadership, cognitive, long term orientation, individualism and uncertainty avoidance cultures.

Therefore since other than power distance, rest of the variables including leadership factors, cognitive factors, uncertainty avoidance, long term orientation and individualism positively correlates with the dependent variable of growth, it also facilitates for the independent variables to build up a positive correlation with growth. In exceptional cases like in power distance contains negative values; it may create an opposite effect on dependent variable of growth.

**Table 5:** Pearson Product Moment Correlation of Variables

Source: Research Data

Correlations							
	Gr ow th	Unce rtaint y Avoi	Long Term Orien tation	Indivi dualis m	Cog nitiv e	Lead ershi p	Po wer Dist anc

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			danc e					e
Growth	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	170						
Uncertainty Avoidance	Pearson Correlation	.587**	1					
	Sig. (2-tailed)	.000						
	N	170	170					
Long Term Orientation	Pearson Correlation	.534**	.557*	1				
	Sig. (2-tailed)	.000	.000					
	N	170	170	170				
Individualism	Pearson Correlation	.573**	.657*	.530*	1			
	Sig. (2-tailed)	.000	.000	.000				
	N	170	170	170	170			
Cognitive	Pearson Correlation	.641**	.461*	.382*	.448**	1		
	Sig. (2-tailed)	.000	.000	.000	.000			
	N	170	170	170	170	170		

Leadership	Pearson Correlation	.728**	.648*	.578*	.644**	.521**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000		
	N	170	170	170	170	170	170	
Power Distance	Pearson Correlation	-.016	-.043	.076	.104	.012	.010	1
	Sig. (2-tailed)	.839	.576	.327	.176	.878	.900	
	N	170	170	170	170	170	170	170
**. Correlation is significant at the 0.01 level (2-tailed).								

### 5.3 Exploratory data analysis (EDA) on statistical assumptions

The researcher has done EDA by using SPSS 20 statistical software. EDA is an essential tool in extracting important variables, detecting outliers in the data set and in testing underlying assumptions based for constructing relationships of the variables. Therefore as a primary technique that could use at the initial stage of data analysis, this is an essential tool used by many of the researchers to get a clear idea about the estimations or uncertainties of parameters and listing out the outliers which could ultimately facilitate in ranking a list of important factors to identify the optimal setting of the data set.

### 5.4 Test of measurement model

In conducting test of measurement models prior to testing model fit, it is essential to validate every measurement model. When considering the nature of the latent and observed variables the researcher has executed a hybrid model using latent variables because confirmatory factor analysis cannot be executed as of the nature of the latent variables of the study. Prior to execute the model testing to identify the hypothesized relationships, it is essential to detect the multicollinearity affect among the variables. Multicollinearity occurs when two or more variables are correlated to each other and it shows redundant output about the responses. This could detect when fitting a regression model and such predictors used to correlate with other predictors in the model (Frost, 2013).

To execute the model effectively with standardized predictors it can remove the multicollinearity and ultimately this would provide a great head - to - head comparison of the correlation among the variables and almost it reveals the classic effects of multicollinearity. As of the results of the bivariate correlation among the exogenous variables of the study, the variable of masculinity (MAS) has bivariate correlation among the exogenous variables above 0.85. Therefore, MAS is not used in structural model for further analysis.

**Table 6:** Bivariate Correlations among the Exogenous Variables before adjusting for Multicollinearity Effect  
Source: Research Data

Variables		Estimate
Cognitive	<--> Leadership	.765
Power Distance	<--> Uncertainty Avoidance	-.043
Power Distance	<--> Long Term Orientation	.076
Power Distance	<--> Individualism	.104
Uncertainty Avoidance	<--> Long Term Orientation	.557
Uncertainty Avoidance	<--> Individualism	.657
Long Term Orientation	<--> Individualism	.530
Power Distance	<--> Cognitive	.039
Uncertainty Avoidance	<--> Cognitive	.783
Long Term Orientation	<--> Cognitive	.644
Individualism	<--> Cognitive	.738
Power Distance	<--> Leadership	-.027
Uncertainty Avoidance	<--> Leadership	.606
Long Term Orientation	<--> Leadership	.553
Individualism	<--> Leadership	.577
Power Distance	<--> Masculinity	.042
Uncertainty Avoidance	<--> Masculinity	.677
Long Term Orientation	<--> Masculinity	.608
Individualism	<--> Masculinity	.625
Masculinity	<--> Leadership	.691
Masculinity	<--> Cognitive	.865

**Table 7:** Bivariate Correlations among the Exogenous Variables after adjusting for Multicollinearity Effect  
Source: Research Data

Variables		Estimate
Cognitive	<--> Leadership	.765
Power Distance	<--> Uncertainty Avoidance	-.043
Power Distance	<--> Long Term Orientation	.076
Power Distance	<--> Individualism	.104
Uncertainty Avoidance	<--> Long Term Orientation	.557
Uncertainty Avoidance	<--> Individualism	.657
Long Term Orientation	<--> Individualism	.530
Power Distance	<--> Cognitive	.039
Uncertainty Avoidance	<--> Cognitive	.784
Long Term Orientation	<--> Cognitive	.647
Individualism	<--> Cognitive	.739
Power Distance	<--> Leadership	-.028
Uncertainty Avoidance	<--> Leadership	.605
Long Term Orientation	<--> Leadership	.551
Individualism	<--> Leadership	.575

## 5.5 Model Fit

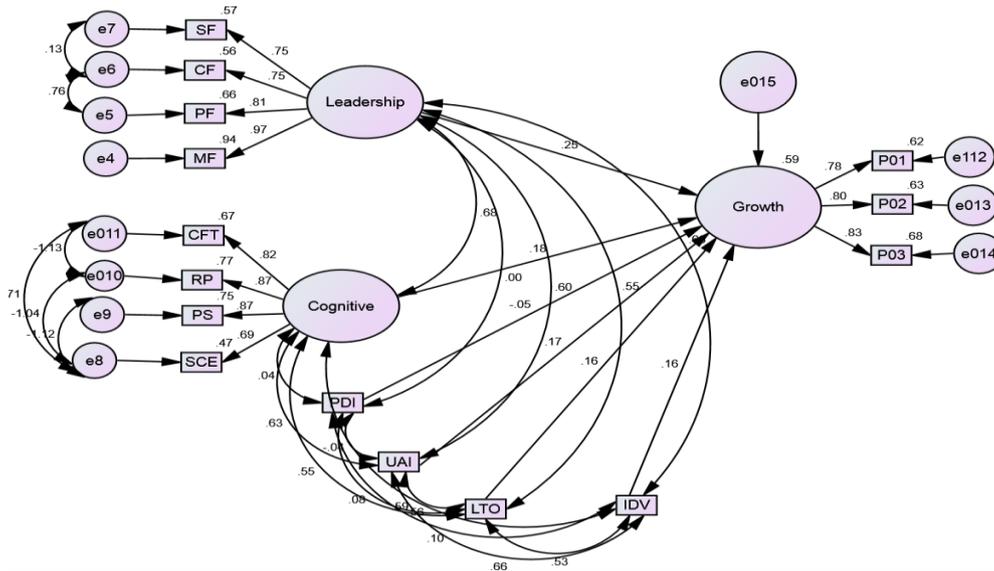
In Structural equation modeling it is an essential requirement to measure the model fit indices because once obtaining a model that fits well, it could identify as a theoretically consistent model. And then it could use to interpret the parameter estimates and individual tests of significance of each parameter estimate. In such cases, AMOS allows for the use of modification indices to generate the expected reductions or the modifications needed to acquire overall model fit. As Hu & Bentler, (1998) cited in Jeewandara, (2015), had introduced cut off criteria for model fit indices of structural equation modeling. When assessing the model fit summary it is rare that the model fits becoming well at first attempt. In such situations model modification is required to be done in order to obtain a better fitting model. Therefore after executing number of modifications it has been capable to produce an accurately fitted model along with the theoretical inferences. Following Table shows model fit indices after alterations done for the initial model.

**Table 8:** Absolute and incremental fit indices of the initial model after modifications  
Source: Research Data

Indices	Cut off values and	Initial Model Values	Decis
Absolute Fit Indices			
Relative $\chi^2$	<3.00	2.015	Satisf
RMSEA	<0.07	0.042	Satisf
GFI	>0.90	0.970	Satisf
AGFI	>0.90	0.952	Satisf
RMR	Lower the better	2.039	-
HOELTER	>200	238	Satisf
Incremental Fit Indices			
NFI	>0.90	0.974	Satisf
TLI	>0.95	0.983	Satisf
CFI	>0.95	0.952	Satisf
PCLOSE	>0.50	0.628	Satisf

As Hooper , Coughlan, & Mullen, (2008) suggested if all absolute and incremental indices were reached as closer to one, it can identify as acquisition of full model fit. After attaining respective standardized limits under model fit, the researcher has constructed the modified model in regard to the modified estimates.

By observing the relationship between the dimensions and its corresponding variables the researcher affirms that there is a significant interrelationship between its dimensions towards independent variable. Since according to entrepreneurial leadership as an independent variable has its dimensions strategic factors ( $\beta = .77$ ), communicative factors ( $\beta = .88$ ), personal factors ( $\beta = .93$ ) and motivational factors ( $\beta = .89$ ). Entrepreneurial cognition has its dimensions counterfactual thinking ( $\beta = .78$ ), risk perception ( $\beta = .83$ ), processing style ( $\beta = .88$ ) and susceptibility to cognitive errors ( $\beta = .60$ ). As of the estimated final standardized model, it shows somewhat lower beta values in exogenous and endogenous variables compared to the model which had prior to do modifications. However as of the resulted model fit indices shows a best fitted model after executing several suggested modification indices.



**Figure 1:** Standardized estimates of the modified model  
 Source: Research Data using data analysis tool (Amos 20)

**Table 9:** Regression Weights  
 Source: Research Data

			Estimate	S.E.	C.R.	P
Growth	<---	Leadership	.073	.027	2.675	.007
Growth	<---	Cognitive	.049	.021	2.377	.017
Growth	<---	Power Distance	-.001	.001	-.815	.415
Growth	<---	Uncertainty Avoidance	.048	.025	1.962	.050
Growth	<---	Long Term Orientation	.026	.013	2.041	.041
Growth	<---	Individualism	.038	.020	1.860	.063

As of the initial model according to Kline’s effect size criteria of path coefficients values (Kline, 2011), leadership, cognition, individualism and long term orientation acts as a medium effect predictors (exogenous variables) of venture growth (endogenous variable).

**Table 10:** Kline’s Effect Size Criteria of Path Coefficients  
 Source: Research Data

Model Path Coefficient	Size of the Effect
< 0.10	Small Effect
< 0.30	Medium Effect
>0.50	Large Effect
*Significant at p < .001	
**Significant at p < .05	

## 5.6 Conclusion

The main intention of executing this study was to test the theoretical inferences regarding the relationship creates over venture growth through internal and external aspects. In regards to the findings of the research study hypothesized constructs of leadership and cognition have

identified that there having a positive impact towards venture growth. According to the statistical findings it has been confirmed the theory while accepting the hypothesis by way of identifying two of the independent variables as positively related highly impacted predictor variables at 0.5 level of significant level. On the other hand considering the statistical conclusions of hypothesizes in relation to cultural dimensions, masculinity as a variable tested under the model has eliminated at the stage of testing multicollinearity effect of variables. The rest of the dimensions have been proceeds in testing and it was hypnotized that high power distance negatively influence over venture growth and according to the statistics of the current study confirmed that the high power distance adversely effect on venture growth by indicating a negative relationship between those two constructs, but

since the relationship was cannot be proven as statistically significant, the hypothesis had to be rejected. Next it was hypothesized that low uncertainty avoidance cultures have a positive impact towards venture growth. As of the findings the researcher could accept the hypothesis because it could identify a positive direct relationship between the two aspects at 0.5 level of significance. In relation to individualism index, it was hypothesized that individualism cultures negatively influence over attainment of venture growth. As of the actual scenario of Sri Lankan context it is commonly accepted Sri Lanka as a collective culture. As of the statistically observed results the researcher generated the output saying that the rejections of hypothesis and at the mean time the relationship between the two aspects are not been statistically significant.

As of the final hypothesis constructed considering the relationship between long term orientation and venture growth has identified having a positive impact. Statistics on this regard has accepted the hypothesis by producing a positive direct effect between two constructs and researcher concludes that high long term oriented cultures do have positive influence over venture growth. Confirming the theory (table 5.8), at the end of this study the researcher concluded that the chosen independent variables of entrepreneurial leadership, cognition, uncertainty avoidance and long term orientation as predictor variables of venture growth at 0.5 level of significance having positive direct relationship between constructs.

### **5.7 Limitations of the study**

The first limitation of this study is the level of impact that creates on entrepreneurial venture growth will influence by several other internal and external variables. Risk taking propensity, personality traits and organizational resources can be identified as some of the other internal factors and social networks, organizational structure, technology development and government support programs can be identified as some of the other external factors. But as per the easiness of the execution of the study the researcher has contrasted the research area into basically leadership and cognitive factors as internally influencing factors and under externally influencing factors it has identified the cultural factors.

Not only that but also when considering about the dependent variable of growth, technological advances and other composite growth measures were not utilized in the study except the measurements of equity, employment and sales. Despite studying the whole population of the small and medium entrepreneurs in the country, the research is limited to investigate only about the entrepreneurs who have registered under Regional Offices at Regional Development Division of Industrial Development Board with a comparatively small sample. It is possible that if the research considers other populations in the study, it would provide different results.

## **5.8 Suggestions for the future research**

By way of executing this area of study, it also facilitates future researchers to broaden their mind in order to reveal on different viewpoints on the same area of study in more comprehensive manner. As of the empirical studies been demonstrated, many of the researchers only do focus on resources and performance while providing less attention on how management can effectively be utilize these resources. Therefore future research should focus both the resources as well as their effective utilization. Limited number of constructs in the model would narrow down the research area and also on the other hand the scope could even make broader by future researchers. Out of the measurements for the dependent variable of growth including sales, employees and equity according to Shepherd & Wiklund, (2009) was suggested that equity as a very significant measure of venture growth but the researcher were not able to capture financial data of the ventures since the inaccurate simple financial records maintained by most of the ventures (SMEs). Therefore it is considered as a needful to be addressed by the future researchers in order to execute the study with more reliable data sources.

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