A LONGITUDINAL EXAMINATION OF THE IMPACT OF FOUNDING OWNER OPERATOR CHARACTERISTICS ON NASCENT VENTURE PERFORMANCE: EVIDENCE FROM THE KAUFFMAN FIRM SURVEY

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ABSTRACT

This study attempts to revive and clarify the debate on 'the entrepreneurial man'. We longitudinally examined the effects of seven founding-owner-operator characteristics (prior industry experience, level of formal education, age, gender, ethnicity and time committed to business operations) on nascent venture performance. Our results indicate that owner work experience, level of education and hours worked in the business have significant effect on nascent venture performance, while inadequate owner reputation and luck of ethnic social capital may negatively affect nascent venture performance. Our findings also suggest that characteristic of the 'entrepreneurial man' are dynamic and leans towards a temporal contingency model. Different entrepreneur characteristics seem to assume prominence in firm performance at different times in a nascent venture's life trajectory.

Key words: Founding owner characteristics, nascent venture performance; longitudinal study, Kauffman Firm survey

Extant literature suggests growing interest in nascent entrepreneurship research. However, not much of the attention has been directed at nascent venture performance. While existing literature is replete with numerous studies that have attempted to examine the impact of myriad individual characteristics on venture performance, the results have been inconsistent. Consequently, Katz and Gartner (1988) concluded that trait stream of entrepreneurship research has reached a *cul-de-sac* (Katz & Gartner, 1988; Evers, 2003).

We disagree with Katz & Gartner (1988) that trait related stream of entrepreneurship research has reached a dead-end. Rather, conflicting results in trait related entrepreneurship research seem to pose greater challenge to scholars to further probe entrepreneur characteristics that impact nascent venture performance. The present state of the literature provides opportunity to refine the profile of 'the successful entrepreneur'. The status of the literature also beacons scholars to use more robust methods; including the longitudinal approach (Davidsson, 2006) and new data sets (Johnson et al., 2006) to explicate the impact of founding-owner-operator characteristics on nascent venture performance to identify more robust relationships.

Nascent venture performance may be defined as the ability of an emerging business to exist profitably within one to five years of its establishment (Driessen & Zwart, 1999). Though the balance score card (Kaplan & Norton, 2001) has been advocated as a comprehensive measure of business performance, financial performance indicators are still the most popular measure used to gauge business performance (Menefee & Parnell, 2007; Song et al., 2008). Not only is profit maximization the prime object of for-profit organizations, but also objectively

variable data on financial indicators such as profit margin return on assets, assets turnover, earnings per share (Jacobson, 1987), market value of stock (Menefee & Parnell, 2007), sales, expenses, and market share are more readily available and accessible in financial statements and annual reports of businesses.

Nascent venture performance as an emerging field of research is yet to be fully explored. Some studies on the entrepreneur have examined the impact of founders' prior industry experience (Orser, Cedzynski & Thomas, 2007), level of formal education (Romijn & Albaladejo, 2002), age (Rai, 2008; Reynolds et al., 2003), gender (Schaper et al., 2007), ethnicity (Robb, 2002), and time committed to business operations (Marcati, et al., 2008) on venture performance. However, there is little or no evidence in the literature to suggest that earlier studies have attempted to represent 'the entrepreneur's profile' in a single model containing all the above mentioned personal characteristics to longitudinally examine their impact on nascent venture performance. A number of studies have examined the effect of firm-reputations on business performance also, but only few have focused on the effect of personal reputation (Podolny, 1994) of the entrepreneur on nascent venture performance.

To address this gap in the literature, we comprehensively examined the effects of the following founder-owner-operator characteristics: age, gender, level of formal education, previous industry experience, ethnicity, number of hours founder committed to business operations and owner's personal reputation on nascent venture performance. In so doing, we used the longitudinal research method (Davidson, 2006) and a relatively new dataset (Kauffman Firm Survey) as advocated by Johnson et al. (2006) to conduct this study. Our objective is to attempt to provide a more robust explanation of entrepreneur factors that influence nascent venture performance and reignite the debate on the 'entrepreneurial man' which is critical to defining the field of entrepreneurship.

The theoretical foundation for this study is anchored in the trait model. According to trait theory, entrepreneur characteristics (Delmar & Shane, 2006; Schaper et al., 2007) tend to impact business performance. There is however no agreement among scholars as to which ideal set of traits or characteristics constitutes the "entrepreneurial man" (Schwienbacher, 2007). Thus, in attempt to further clarify the "entrepreneurial man", we test the impact of the following seven founding-owner-operator characteristics on nascent venture performance.

The level of educational of a nascent entrepreneur is an important element of human capital. It impacts innovative capacity of nascent businesses leading to higher nascent venture performance (Romijn & Albaladejo, 2002) The level of education of the nascent entrepreneur also specifically affects ability to access loans enabling nascent businesses to have greater capacity to perform (Bates, 1990). In this light, we hypothesize that:

> *Hypothesis H_1: Founding owner operator's level of education will have positive impact on nascent venture performance.*

Similar to the relationship between levels of founding-owner-operator education and nascent venture performance, founding-owner-operator's prior work experience is another important element of human capital that impacts nascent venture performance. Several studies have demonstrated that founder's managerial experience (Orser, Cedzynski & Thomas, 2007) and industry experience (Duchesneau & Gartner, 1990) are positively related to setting up a new business and initial business performance (Audia &Rider, 2005). Based on the literature, we hypothesize that:

> *Hypothesis H_2: Number of years of founding owner operator prior industry experience will have a positive impact on nascent venture performance*

Entrepreneurial commitment is the emotional, intellectual and physical effort that a founder invests in a venture (Erikson, 2002). Studies suggest that owner commitment is vital to business performance and this is often indicated by the number of hours the founding-owner-operator spends working in the business (Loscocco & Leitch, 1993). Most entrepreneurs are "workaholics" (Burch, 1986) who work diligently for long hours (Schein, 1987) in their businesses. As a result, Marcati et al. (2008) concluded that entrepreneur conscientiousness promotes propensity to innovate in nascent ventures. Using earlier scholars work as a foundation, we hypothesize that:

> *Hypothesis H_3: The average number of hours a founding-owner-operator works in his (or her) business each week, will have a positive impact on nascent venture performance.*

Founding owner-Operator's Reputation may also affect nascent venture performance. Marsh (1994) and Podolny (1994) defined reputation as the degree of trust an individual projects based on the individual's past performance. Reputation is a social capital and an intangible asset (Michalisin et al., 1997) that can help a nascent entrepreneur raise financial capital (Shane & Cable, 2002) and attract and retain customers. We therefore conclude that a founding owner operator's personal reputation will ultimately contribute to higher nascent venture performance. With support from the existing literature, we hypothesize as follows:

Hypothesis H_4: Founding-owner-operator reputation (surrogated by personal credit card use for business) will have a positive impact on nascent venture performance.

Founder age has a positive relationship with experience (Rai, 2008) and has been established to have a non-linear relationship with the propensity to become a successful nascent entrepreneur (Cowling & Taylor, 2001; Fairlie, 2004). Reynolds et al. (2003) suggest that the relationship between age and entrepreneurial performance may be an inverted U-shape. Based on the literature, we hypothesize as follows:

Hypothesis H_{5a}: Founding-owner-operator age will have a positive association with nascent venture performance.

Hypothesis H_{5b}: Founding-owner-operator age will have a quadratic relationship with nascent venture performance

The literature suggests that men are twice as likely to become nascent entrepreneurs compared to women in Western industrialized countries (Minniti, Arenius & Langowitz, 2005; Wagner, 2007). The main reason cited for the dominance of men over women in business-founding is that women are more risk-averse than men (Eckel & Grossman, 2003) and risk and return are generally positively related. However, men and women nascent entrepreneurs who start businesses in a-typical industries normally reserved for the opposite gender tend to be more innovative and ingenious in their management style in order to overcome gender-related barriers and gain legitimacy in industries seen as turfs of the opposite gender (Blake & Hanson, 2005). Using these observations as a pedestal, we hypothesize as follows:

Hypothesis H_6: Founding-owner-operator gender will influence nascent venture performance

Ethnicity does influence ability to set-up a business and raise capital through social networks. It may also partly account for different levels of innovation in nascent ventures (Aldrich & Waldinger, 1990). Lee and Peterson (2000) pointed out that a group's "…propensity to generate autonomous, risk-taking, innovative, competitive, aggressive and proactive entrepreneurs and firms is based on its cultural foundation." Nascent entrepreneurs of particular ethnic groups may have access to rotating ethnic based financial capital, ethnic based market and social capital in their environment that non-members may not be able to access (Aldrich & Waldinger, 1990). Such social capital helps ethnic based nascent enterprises to gain competitive advantage. We therefore hypothesize as follows:

Hypothesis $H_{7:}$ Founding-owner-operator ethnicity will impact nascent venture performance.

METHODOLOGY

We used a passive longitudinal design embedded in the nomothetic approach (Luthans & Davis, 1982) to study a panel of cohort of businesses that came into being in the United States in 2004. The unit of analysis is the firm. The adoption of a passive longitudinal design enabled us to utilize data collected repeatedly on a group of subjects without attempting to manipulate other potential extraneous variables to test theories about causal relationships (Dwyer, 1983), where it was not possible for us to conduct experiments. Additionally, the nomothetic approach brought more scientific objectivity into the study by emphasizing the general, group centeredness and allowed us to use quantitative techniques (Luthans & Davis, 1982; Scandura & Williams, 2000). Data was sourced from the Kauffman Firm Survey (KFS) longitudinal dataset; a high quality longitudinal data collected, clean and organized by a reputable professional research firm, Mathematica Policy Research Inc. (MPR), contracted by the Kauffman Foundation and the United States National Opinion Research Center (NORC). Some of the variables and data used in the study were directly adopted from the original (KFS) dataset, while others were derived from existing variables in the KFS dataset; by either computing or summing up relevant fragmented variables.

Independent variables
The independent variables used in this study are grouped in to metric and dummy variables. The metric variables are owner age (Cowling & Taylor, 2001; Rai, 2008), quadratic term of owner age (Reynolds et al.,2003), years of prior owner industry experience (Orser, Cedzynski & Thomas, 2007), average number of hours owner worked in the business each week (Erikson, 2002; Loscocco & Leitch, 1993) and owner's highest level of educational attainment (Romijn & Albaladejo, 2002). All these variables contained ratio scales except educational attainment which was an ordinal scale of nine levels.

The two dummy variables used in the study are owner personal reputation (Michalisin, Smith, & Kline, 1997) which was surrogated by owner's personal credit card used for business and owner ethnicity (Betencourt & Lopez, 1993; Waldinger, Aldrich & Ward, 1990) which was captured by owner's race.

Dependent Variable
The dependent variable (Nascent Venture Performance) is a composite variable (Fletcher & Neubaum, 2008) that did not exist directly in the KFS and had to be computed. It was formed by adding the standardized values of profit or loss margin, return on assets, assets turnover ratio and sales-to-expenses ratio. These four components of the nascent venture performance index did not in themselves also directly exist in the KFS data set, but variables that enabled them to be computed namely: profit, loss, sales, expenses and various classes of assets exist in the data set. The use of an index provides a more rigorous measure of firm performance than just using one of the component variables as the dependent variable (Fletcher & Nusbaum, 2008). The resultant multiple regression model used for the study is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 - \beta_8 X_5^2 + \varepsilon$$

See Appendix 'A' for identification of variables in the model.

Further Cleaning of Secondary Data
After selecting the variables and computing those that did not exist directly in the KFS, the next step was to further clean the data where necessary. The process involved correcting identified data entry errors and resolving missing data problems (Hair et. al., 2006). There were a lot of missing data in the variables of interest in the KFS. Since the study was concerned with firms with performance record over a four year period, all sample units that either contained missing data, or had undefined computed values were deleted from the sample. Out of the original sample size of 4928 firms, 862 remained without missing data after the deletion exercise (Hair et al., 2006). The remaining sample size of 862 without missing data was considered big and representative enough to allow a meaningful statistical analysis (Hair et al., 2006).

In order to ensure that data used in performing analysis have the same stratified representation as the original data set prior to cleaning, the percentages of sample strata representation in the original dataset (in terms of women founded high tech. firms, men founded high tech. firms, women founded medium tech. ventures, men founded medium tech. firms, women founded low tech. firms and men founded low tech. firms) were computed. This process allowed the inclusion of all the remaining 17 women-founded high-technology firms, all the 40 women-founded medium-technology firms and all the 80 women-founded low-technology firms that did not have missing data. Random sampling was then employed to select 92 out of the remaining 131 male-founded high-technology businesses; 162 out of the remaining 205 men-founded medium-technology businesses and 362 out of the remaining 390 men-founded low-technology business that did not contain missing data. This approach to sub-sampling enabled the utilization of 754 (87.5%) out of the 862 sample units that remained without missing data after data cleaning for the final analysis.

The selected subsample was tested to see if it satisfied the multiple regression assumptions of normality of the distribution, homoskedasticity, linearity of the data and absence of co-linearity among variables in the study (Hair et al., 2006; Mendenhall & Sincich, 2003) prior to regression analysis. All the assumptions were fairly met. Histograms fitted with normal curves for the metric variables were fairly normal with skewness being within ± 1 and kurtosis being within ± 3. Test of homoskedasticity and linearity were done by plotting the standardized residuals (ZRESID) as the dependent variable against the standardized predicted values (ZPRED) as the independent variable for all the four years and they generally clustered within ± 3 standard scores from the zero mean with a few outliers (Hair et al., 2006; Mendenhall & Sincich, 2003). Thus the data exhibited a fairly robust homoskedasticity and linearity. We dropped the Age^2 variable to eliminate multicollinearity in the data.

RESULTS

The global F-test indicates that founder-operator characteristics (represented by owner education, owner industry experience, owner work effort, owner reputation, owner age, owner gender and owner ethnicity together) had significant effect on nascent venture performance in only Year-1 and Year-4 in the early lives of the businesses, but had no significant effect in the intervening period of year-2 and year-3. In year-1, the F-statistic was 2.856 (p = .006), while it stood at 5.481 (p= .000) in year-4 (see Table 2).

Table 2
Results: Impact of Owner characteristics on Nascent Venture Performance

	Model Summary		F- Test	
	R-Squared	Adjusted R-Squared	F	Significance
Year -1	.026	.017	2.856	.006
Year-2	.006	-.003	.638	.724
Year-3	.011	.000	1.076	.437
Year-4	.049	.040	5.481	.000

Hypothesis H_1 was supported in two out of the four yearly periods; namely year-1 and year-4. Owner's level of formal educational attainment had significant impact on nascent venture performance in the first year and in the fourth year. Thus Founding-owner-operator's level of education t-statistic was 2.127 (p = .034) in year-1 and 2.558 (p =.011) in year-4 (See Appendixes B, C, D and E).

Hypothesis H_2 was supported only in year 1. The t-statistic of number of years of founding-owner-operators' prior industry experience was 3.463 (p = .001) in year-1. It was not significant in the remaining three years covered by the study (See Appendixes B, C, D and E).

Hypothesis H_3 was supported in years 3 and 4 only .The average number of hours founding-owner-operators worked in their businesses had significant effect on nascent venture performance in years 3 and 4. The t-statistic for the average number of hours founding-owner-operators worked in their businesses was 2.183 (p=.029) for year-3, and 2.122 (p=.034) for year (See Appendixes B, C, D and E).

Hypothesis H_4 and Hypothesis H_7 were both supported in only year-4, but contrary to the expected positive direction. Both founding-owner-operator reputation (surrogated by owners' personal credit card use for business) and ethnicity respectively had significant negative effects on nascent venture performance in year-4. The t-statistic of owner personal credit card use for business in year-4 was -3.214 (p=.001), while that of founder racio-ethnicity stood at -3.470 (p=.001) in the same year (See Appendixes B, C, D and E).

Hypothesis H_{5a} and Hypothesis H_6 were not supported. Neither founding-owner-operator age nor founding-owner-operator gender had any significant effect on nascent venture performance in any of the four years under study (See Appendixes B, C, D and E).

Correlation Analysis
To triangulate the results of the regression analysis, the t-values of the independent variables for each of the four years were correlated among the years to establish if any longitudinal consistency could be established in the behavior of the independent variables across time. The only significant correlation was between year 1 and year 2 and this was even an inverse correlation. Thus the correlation between year 1 and year 2 was .82 (p=.024). This suggests that the seven founding owner characteristics did not generally have consistent influence over nascent venture performance in the initial four years of existence of the nascent ventures in the sample. See appendix F.

DISCUSSION

The seven founding-owner-operator characteristics together appear to influence nascent venture performance, but inconsistently over time. They had a positive effect on nascent venture performance in year-1, but did not have any effect again till year-4. Among the individual variables, owner industry experience (Audia & Rider 2005; Duchesneau & Gartner, 1990) and level of owner educational attainment (Romijn & Albaladejo, 2002) appeared

to be the only critically important influential personal factors that positively influenced nascent venture performance in the first year of existence.

The standardized Beta coefficient of Owner prior industry experience in year one was .136 which was greater than that of educational attainment which was .078.This suggest that industry experience had a stronger influence in year-1 than educational attainment even though both had significant effects on nascent venture performance (See Appendixes B, C, D and E).

In a year that none of the other founding-owner-operator characteristics under consideration had significant effect on nascent venture performance (i.e. year-3), founding-owner-operator commitment and effort reflected by the number of hours nascent entrepreneurs commit to and worked in their businesses was the sole entrepreneur attribute that contributed to nascent venture performance (Guido & Peluso, 2008). This shows the important role conscientiousness can play in nascent venture performance.

Level of founding-owner-operator education and hours founding-owner-operators spent working in their businesses both tended to positively influenced nascent business performance in more than one year. However, founding-owner-operator level of educational attainment did not influence nascent venture performance in continuous years, while the number of hours founding-owner-operators worked in their businesses influenced startup performance in continuous years when founding-owner-operator perseverance actually started to contribute significantly to nascent venture performance. In this particular study, founding-owner-operator effort was continuously significant in years 3 and 4.

Two Founding-owner-operator characteristics indicators (namely owner reputation captured by owners' use of personal credit card for business) and owners' ethnicity (captured by owners' race) individually had negative effects on nascent venture performance in year-4. The respective negative significance of these two variables is probably due to the lopsidedness of the dummy variables used to capture these two variables. For example, the white race alone accounted for 86% of all the ethnicities represented in each of the four years covered by the study, while the proportion of firms that did not use personal credit card for business was between 57% and 99% of the sample in the four years under review.

Managerial and Public Policy Implications

Findings of the study have several implications for management practice. Human capital; derived from prior industry experience and level of formal education (Orser, Cedzynski & Thomas, 2007; Romijn & Albaladejo, 2002) is the key to initial business success. Among the two sub-elements of human capital, nascent entrepreneurs' prior industry experience is the most critical characteristic to ensure venture success in the first year of business operation.

Founding-owner-operator' personal effort is a vital contributor to nascent venture performance, but it may take not less than two years of business existence for its effect to begin to have significant impact. Hours owner worked in the business was the only entrepreneur characteristic that was significant in year-3 (2007); the year the United States National Bureau of Economic Research (NBER) officially declared recession to have started in the U.S (Blundell-Wignall & Atkinson, 2009; Kashyap A.K., 2010). This suggests that founder effort may be the only nascent entrepreneur characteristics that may keep a business going in hard times of economic downturn. Owner-managers must be aware that reputation and ethnic networks could serve as social capital or lack of such assets could constitute social liability that may influence nascent venture performance negatively.

Implications for future theory development

The results of the study suggest that the debate on 'the entrepreneurial man' is still very much alive and entrepreneur characteristics are still relevant to business performance (Rai, 2008), but their effects are inconsistent across time. Our findings suggest that trait and entrepreneur characteristics theory should be seen as a contingency model. The study also shows that the impact of various entrepreneur characteristics on venture performance may kick-in at different stages along a business ventures' life trajectory.

Limitations

Many original sample units contained missing data and had to be deleted before final sub-sampling and this created a convenient sample frame from which the final sample was drawn for analysis. This is likely to have a slight adverse effect on the randomization of the final sample used for analysis. The relatively large subsample size of 754 used would have mitigated some of the effect of convenience sampling. The use of the original stratification proportions in selecting the final sample for analysis would also have significantly mitigated potential negative effect of convenience sampling. The study was also limited by the fact that it used secondary data not specifically collected for the study. The study did not also address the effects of possible interaction among the variables.

Future research direction

The study can be replicated using other indicator variables for owner characteristics such as the big five personality traits (Barrick & Mount, 1991) or the three most consistently found entrepreneur traits namely risk taking propensity (Broehl1978), internal locus of control (Gatewood, Shaver & Gartner, 1995) and need for achievement (McClelland, 1961).

Comparative studies can be performed by dividing the KFS data between U.S. born and none-U.S.-born nascent entrepreneurs to identify significant characteristics differences between U.S. born and None-U.S. born entrepreneurs that influence nascent venture performance. Also,

The 'entrepreneurial man' may probably be better defined by future studies that longitudinally examine the numerous entrepreneur attributes that have been identified in the literature and then mapped along the life cycle of a business (from inception, growth, maturity and possible demise) to determine the critical life stages that they are most important to firm performance

Conclusion

The study added significantly to the existing body of literature on the 'entrepreneurial man' and nascent entrepreneurship streams of research by suggesting that entrepreneur trait and characteristics theory may fall under the contingency school. The findings also suggest that the effects of personal characteristics on venture performance are transient so nascent entrepreneurs must constantly identify those that optimize performance at different stages of the firm's life cycle.

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Appendix A

Table 1 Key to Acronyms and Variable Notations

Construct	Variable Name	Acronym	Variable Notation
Founding Owner Operator Characteristics	Gender	Gend	X1
	Personal Credit Card use for Business	PerCr	X2
	Hours Owner worked in the Business per Week	Hrs	X3
	Owner Industry Experience	OIE	X4
	Owner Age	Age	X5
	Quadratic Term of Owner Age	Age2	X52
	Owner Ethnicity/Race	Race	X6
	Highest Level of Owner Educational Attainment	Edu	X7
Performance Index	Nascent Venture Performance	Perfm	Y

Appendix B

Table 3 Results: Owner Characteristics Indicators and Nascent Venture Performance –Year 1

Description	Independent Variables							Dependent Variable
Variable Acronym	$Gend_1$	$PerCr_1$	Hrs_1	OIE_1	Age_1	$Race_1$	Edu_1	NVP_1
Variable Notation	X_1	X_2	X_3	X_4	X_5	X_6	X_7	Y_1
Unstan-dardized coefficients	.004	.212	.006	.238	-.01	-.189	.542	
Standardized Coefficients	.001	.007	.054	.136	-.043	-.027	.078	
T value	.017	.198	1.454	3.463	-1.086	-.745	2.127	
Significance	.986	.843	.146	.001	.278	.457	.034	
VIF	1.038	1.017	1.035	1.176	1.2	1.009	1.034	
Tolerance	.964	.983	.967	.85	.833	.991	.967	

Appendix C

Table 4 Results: Owner Characteristics Indicators and Nascent Venture Performance –Year 2

Description	Independent Variables							Dependent Variable
Variable Acronym	$Gend_2$	$PerCr_2$	Hrs_2	OIE_2	Age_2	$Race_2$	Edu_2	NVP_2
Variable Notation	X_1	X_2	X_3	X_4	X_5	X_6	X_7	Y_2
Unstandardized coefficients	-.061	-.248	-.014	-.101	.074	.308	-.007	
Standardized Coefficients	-.01	-.021	-.016	-.059	.035	.044	-.007	
T- value	-.269	-.583	-.43	-1.429	.759	1.211	-.170	
Significance	.788	.56	.668	.154	.448	.226	.865	
VIF	1.041	1.007	1.007	1.258	1.632	1.007	1.38	
Tolerance	.961	.993	.993	.795	.613	.993	.725	

Appendix D

Table 5 Results: Owner Characteristics Indicators and Nascent Venture Performance –Year 3

Description	Independent Variables							Dependent Variable
Variable Acronym	Gend3	PerCr3	Hrs3	OIE3	Age3	Race3	Edu3	NVP3
Variable Notation	X1	X2	X3	X4	X5	X6	X7	Y3
Unstandardized coefficients	.109	.075	.007	.042	-.007	-.082	.014	
Standardized Coefficients	.022	.019	.081	.031	-.051	-.015	.019	
T-value	.584	.505	2.183	.770	-.633	-.395	.415	
Significance	.559	.614	.029	.441	.527	.693	.678	
VIF	1.039	1.013	1.040	1.192	4.858	1.017	1.628	
Tolerance	.963	.988	.961	.839	.206	.983	.614	

Appendix E

Table 6 Results: Owner Characteristics Indicators and Nascent Venture Performance –Year 4

Description	Independent Variables							Dependent Variable
Variable Acronym	Gend4	PerCr4	Hrs4	OIE4	Age4	Race4	Edu4	NVP4
Variable Notation	X1	X2	X3	X4	X5	X6	X7	Y4
Unstandardized coefficients	.285	-.61	.105	.109	-.052	-.849	.436	
Standardized Coefficients	.044	-.115	.077	.060	-.022	-.125	.097	
T-value	1.198	-3.214	2.122	1.591	-.572	-3.470	2.558	
Significance	.231	.001	.034	.112	.567	.001	.011	
VIF	1.041	1.004	1.034	1.119	1.201	1.012	1.120	
Tolerance	.961	.996	.967	.893	.833	.988	.893	

Appendix G

Table7 Correlation between Years

		Year1	Year2	Year3	Year4
Year1	**Pearson Correlation**	**1**	**-.820***	**.573**	**.666**
	Sig. (2-tailed)		**.024**	**.179**	**.102**
	N	**7**	**7**	**7**	**7**
Year2	**Pearson Correlation**	**-.820***	**1**	**-.641**	**-.508**
	Sig. (2-tailed)	**.024**		**.121**	**.245**
	N	**7**	**7**	**7**	**7**
Year3	**Pearson Correlation**	**.573**	**-.641**	**1**	**.555**
	Sig. (2-tailed)	**.179**	**.121**		**.196**
	N	**7**	**7**	**7**	**7**
Year4	**Pearson Correlation**	**.666**	**-.508**	**.555**	**1**
	Sig. (2-tailed)	**.102**	**.245**	**.196**	
	N	**7**	**7**	**7**	**7**

*. Correlation is significant at the 0.05 level (2-tailed).