

Role of Demographic Variables in the Formation of Entrepreneurial Intention

Indira Singh

Abstract: *Entrepreneurship is gaining prominence in schools and colleges across the world. Almost all management post graduate degree program in our country teach the subject through lecture, experiential or a combination of both the methods. The purpose is to make the student aware about the subject and may be to make their entrepreneurial intention stronger. It has been found that individual's intention influences subsequent behavior. Therefore it is pertinent to study factors that influence the formation of intention. This study specifically delves upon the demographic factors that impact the formation of entrepreneurial intention in management students. This study is drawn upon the widely used intentional paradigm i.e the theory of planned behavior (Ajzen, 1991). The theory of planned behavior suggests three conceptually independent antecedents of entrepreneurial intention. Less studied are the demographic variables that also impact intention formation process. Through the model seven demographic variables (gender, age, prior employment experience, parental occupation, parental education, income bracket and family business background) are studied. This study has utilized a quantitative approach. Data has been collected from 532 management students and SPSS has been used to analyze data.*

The results of this study can be utilized in designing course content for various management/ entrepreneurship courses with the objective of enhancing intention for entrepreneurial activities of a student.

Keywords: *Entrepreneurship, Entrepreneurial Intention, Demographic variables, Theory of Planned Behavior*

I. Introduction

The economic development of a nation depends on the level entrepreneurial activities within a nation. Entrepreneurship has been posited as the engine that drives the economy. India is a nation with more than a crore of population. India has rich natural resources. The human and natural resources available have to be used properly for the country to move forward. Utilization of modern technology for harnessing the resources that would provide employment to millions is possible only through encouraging entrepreneurial activities. The adoption of new economic policy (NEP) by the government of India has laid emphasis on entrepreneurship. Thus in the present context entrepreneurship has assumed a more significant role in the economic development of India.

II. Entrepreneurial intention

According to Bird (1988) intentionality been defined as a state of mind directing a person's attention, experience and action towards a specific goal. Therefore entrepreneurial behaviors are also intentional behaviors and intention is a predictor of entrepreneurial behaviors. An individual will venture out and initiate entrepreneurial behaviors when the intention is high with respect to a specific opportunity. Several Studies (Katz, 1988; Reynolds, 1995, Krueger et al., 2000) have proven that entrepreneurial intention to be "primary predictor" of entrepreneurial behaviors. Therefore it becomes pertinent to explore how it is formed. Thus this area is crucial in entrepreneurship research.

III. Demographic Variables and entrepreneurial intention

There are only a limited number of studies addressing the influence of demographic factors in shaping entrepreneurial intentions of students (Wang and Wong, 2004). Also the findings are not consistent. It is still not known whether demographic or personal factors play a major role in entrepreneurial intention formation process.

The present study delves upon the role of demographic factors in shaping entrepreneurial intention of management students. Several researchers have found that demographic factors play a role in the formation of entrepreneurial intention. A large number of studies have tried to identify the underlying factors that motivate the students to engage in entrepreneurial behaviors (Mueller & Dato-on, 2008).

IV. Literature review and hypothesis

This section presents a review of literature and subsequent hypothesis development pertaining to demographic variables of interest.

a) Demographic age and entrepreneurial intention

A review of literature has revealed that there are very few studies that have focused on age as a predictor of entrepreneurial intention. This has been corroborated by Kazmi (1999), Lewis and Massey (2003) and de Kok et al (2010). Recently interest in age as variable impacting entrepreneurial intention has increased. The studies of Levesque and Minniti (2006), Zissimopoulos and Karoly (2008), Kellermanns et al (2008), de Kok et al (2010) and Gielnik et al (2012) have taken age as a variable of interest. However our current understanding is still too fragmented. Levesque and Minniti (2006) found out that age is a triggering factor of entrepreneurial behaviors. Krueger and Brazeal (1994) reported that individual's age affects entrepreneurial intention both directly and indirectly. Also, individual's age is negatively related to entrepreneurial intention ($p < 0.001$). Thus younger individuals should show higher intention for entrepreneurial behaviors than their older counterparts. In the light of the above it becomes important to study and shed light on the role of age on entrepreneurial intention.

H 1: There is a significant positive relation between demographic age and entrepreneurial intention

b) Family Business Background and entrepreneurial intention

Literature is replete with studies investigating career choice intentions of students intending to found a firm after completing their studies. The studies in this field are based on Theory of Planned Behavior and Social Cognitive Theory. Family business background represents a particular context in which intentions are formed. Comparisons are made between those intending to found a firm and those intending to take up organizational employment. Family business background is an important variable in entrepreneurial intentions literature. It has been posited by Drennan et al., (2005) that people who have a parent or close family member who is an entrepreneur are more likely to follow an entrepreneurial career path. Such individuals have the option to found their own company, take up organizational employment or become a successor in family business. According to Greve and Saleff (2003), family business background may lower perceptual barriers to entrepreneurial behaviors since the individual can capitalize on their networks and larger social capital.

H 2: There is a significant positive relation between family business background and entrepreneurial intention of individuals.

c) Socio economic status and entrepreneurial intention

According to Hsu, et al., (2007), the socio economic status of the family has an impact on the student's choice of an entrepreneurial career. This can be so as affluent parents are capable of providing more financial support to their progeny. Such children have less pressure to take up organizational employment or stable job and tend to be more risk taking. These factors have an impact on entrepreneurial intention.

In this study the respondents have been divided in three income brackets lower, middle and higher. 53% respondents come from higher income bracket, 33% from middle income bracket and 14% from lower income bracket.

H 3: The socio economic status of an individual is significantly related with the entrepreneurial intentions of students

d) Gender and entrepreneurial intentions

The relation between gender and entrepreneurial intention makes for a very interesting study. Literature is replete with studies delving upon this linkage. Several studies report that men feel themselves more efficient and oriented to create a new venture than women (Sanchez, 2011). Zeffane (2013) in the study carried out in United Arab Emirates reported no statistically significant difference on the overall entrepreneurial potential between males and females.

Gupta et al. (2008, 2009) examined the role of socially constructed gender stereotypes and their influence on the entrepreneurial intentions of males and females. They did not find statistically significant difference in the entrepreneurial intention of males and females.

There is much speculation in research about differences in entrepreneurial intentions between males and females. Several studies have found contrasting results. The study of Kickul et al., (2010) among 5000 middle and high school students observed gender gaps in entrepreneurial interest among adolescent students. Zaidatol and Afsaneh (2009) found significant difference in the entrepreneurial intention between male and female students where the male students obtained a higher mean score. Shinnar et al. (2012) examined how culture and gender shaped entrepreneurial perceptions thus in the process entrepreneurial intentions across three nations. The findings of the study reported significant gender differences in perception of barriers. Though the gap was not consistent across cultures. The study of Strobl et al, (2012) is in agreement with the study of Shinnar et al (2012). It was reported that male students had more positive attitude towards entrepreneurship and stronger entrepreneurial intentions. Since there is confusion in literature the following hypothesis is proposed accordingly.

H 4: There is a positive relationship between gender and entrepreneurial intention of management students

e) Father’s occupation and entrepreneurial intentions

Boz and Ergenelli (2013) in their study in Turkey went on to analyze parents of women entrepreneurs in Turkey. They investigated the parents educational level and their jobs as motivating factors. Data was collected from 104 women entrepreneurs and 108 women who are not entrepreneurs. The results revealed that especially fathers of women entrepreneurs were also entrepreneurs while the fathers of women who are not entrepreneurs had governmental status.

H 5: There is a significant positive relation between a management student’s father’s occupation and intention for entrepreneurial behaviors.

f) Mother’s occupation and entrepreneurial intentions

Only one research study has been found linking mother’s occupation with entrepreneurial intention of students. Keat, Selvarajah, Meyer (2011) in their study examined relationship between some contextual factors and entrepreneurial intention. They found a statistically significant relationship between entrepreneurial intention and gender, work experience and mother’s occupation.

H 6: There is a significant positive relation between a management student’s mother’s occupation and intention for entrepreneurial behaviors.

g) Graduation background and entrepreneurial intentions

V. Research Methodology

a) Primary Data

Primary data was collected over a period of 6 months from various management institutes in Mumbai. The present research has made use of questionnaire as data collection method. Data has been collected from 750 Masters level students enrolled in various management institutes in Mumbai. In all 532 questionnaires were found usable and hence retained for analysis.

b) Secondary Data

Relevant online journal articles were accessed and analyzed as evidence to support the findings of this study. The articles were downloaded through online databases provided by NITIE library together with newspaper and published articles.

c) Questionnaire

Entrepreneurial Intention Questionnaire (EIQ) scale as adapted and used in this study has 38 items. Another 10 items are for collecting personal data of the respondent. The items have been built as 7-point likert-type scales. The demographic thus data collected has been analyzed using SPSS ver 20.

VI. Study Model

The study model has been delineated as follows (Figure-1). It is a recursive model. Each arrow represents a hypothesis. The statistically significant linkages will be determined. Correlation and multiple regression will be used to determine significant model paths to determine final model.

INSERT FIGURE 1 HERE

VII. Data Analysis And Findings

Table-1 reveals that qualification of students is contributing most towards the formation of entrepreneurial intention followed by occupation of mother. It seems mothers occupation has an impact on the process of entrepreneurial intention formation of management students.

VIII. Significant Model Paths

The significant model paths are reported in the table given below:

Table-4 Significant Model Paths

Model	Standardized Coefficients	t	Sig.	
				Beta
1	INTERCEPT		12.468	.000
	AGE(X1)	.076**	1.779	.076
	INCOME(X2)	-.074**	-1.682	.093
	GENDER(X3)	-.067	-1.575	.116
	FATH_OCCUP(X4)	.084**	1.716	.087
	MO_OCCUP(X5)	.095**	2.203	.028
	BUSN_BACK(X6)	-.199*	-4.089	.000
	QUALI(X7)	-.095**	-2.287	.023
	R ²	0.104		

	Adjusted R ²	0.092		
	F	8.695**		
	N	532		

** Significant at 1%

*Significant at 5%

IX. Discussion And Conclusions

The results show that age, income, parental occupation, and graduation background is positively influencing entrepreneurial intention at 1% significance level. Family business background is strongly influencing entrepreneurial intention at 5% significance level. Gender is not influencing entrepreneurial intention at all. Robinson et al. concluded that this approach has a limitation in it being static in nature (Robinson et al., 1991).

To examine the influence of demographic variables on the dependent variable entrepreneurial intention multiple linear regression has been used. The results so obtained are presented in Table-4. The results indicate that the model explains about 10.4% of variation in entrepreneurial intentions. The demographic variables considered explain 10.4% of variation in entrepreneurial intentions. The model fit indicators i.e adjusted R² is significant.

The final model will not have a path leading from gender to entrepreneurial intention. The final model will have paths leading from age, income, gender, father's occupation, mother's occupation and qualification to the dependent variable entrepreneurial intention.

There are several problems in using demographic variables to predict entrepreneurial intentions. Firstly, entrepreneurs react to a certain specific circumstance and not respond to a set of demographic characteristics. Secondly, in several research studies demographic characteristics are used instead of personality characteristics (Bowen & Hisrich, 1986). This creates confusion and does not bring out clarity in this line of research.

Also, specifically, it is not clearly known in literature whether environment or the individual's personal characteristics drive the student's career decision towards entrepreneurial behaviors rather than taking up organizational employment.

References

- [1]. **Bird .B. (1988)**. Implementing entrepreneurial Ideas: The case for Intentions. *Academy of Management Review*, Vol. 13, No.3, 442-453.
- [2]. **Bowen, D. D. and Hisrich, R. D. (1986)**. The Female Entrepreneur: A Career Development Perspective. *Academy of Management Review* 11: 393-407.
- [3]. **Boyd, N. G., & Vozikis G. S. (1994)**. The Influence of Self-Efficacy on the Development of Entrepreneurial Intentions and Actions. *Entrepreneurship Theory & Practice*, summer, 63-77.
- [4]. **Boz Anil, Azize Ergeneli (2013)**. *Intellectual Economics 2013*, Vol. 7, No. 1(15), p. 63–73
- [5]. **de Kok, J. d., Ichou, A. and Verheul, I. (2010)**. New Firm Performance: Does the Age of Founders Affect Employment Creation? Zoetermeer: EIM Research Reports.
- [6]. **Drennan, J.Kennedy, J. and Renfrow, P. (2005)**. "Impact of childhood experiences on the development of entrepreneurial intentions", *International Journal of Entrepreneurship and Innovation* 6 (4): 231-238.
- [7]. **Gielnik, M. M., Zacher, H. and Frese, M. (2012)**. Focus on opportunities as a mediator of the relationships between business owners' age and venture growth. *Journal of Business Venturing*, 27: 127-142.
- [8]. **Greve, A. and Saleff, J. W. 2003**. "Social networks and entrepreneurship" *Entrepreneurship Theory and Practice* 28: 1-22.
- [9]. **Gupta, Vishal, K., Daniel, B., Turban, S., Arzu, W., & Arijit, S. (2009)**. The Role of Gender Stereotypes in Perceptions of Entrepreneurs and Intentions to Become an Entrepreneur. *Entrepreneurship Theory and Practice*, 33(2), 397-417. <http://dx.doi.org/10.1111/j.1540-6520.2009.00296.x>
- [10]. **Gupta, Vishal, K., Turban, Daniel, B., Bhawe, & Nachiket, M. (2008)**. The effect of gender stereotype activation on entrepreneurial intentions. *Journal of Applied Psychology*, 93(5), 1053-1061. <http://dx.doi.org/10.1037/0021-9010.93.5.1053>
- [11]. **Hsu, D. H., Roberts, E. B., & Eesley, C. E. (2007)**. Entrepreneurs from technology-based universities: Evidence from MIT. *Research Policy*, 36, 768–788.
- [12]. **Kazmi, A. (1999)**. What Young Entrepreneurs Think and Do: A Study of Second- Generation Business Entrepreneurs. *Journal of Entrepreneurship*, 8 (1), 67-77.
- [13]. **Keat, O. Y., Selvarajah, C., & Meyer, D. (2011)**. Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students. *International Journal of Business and Social Science*, 2(4), 206-220.
- [14]. **Kickul, Jill, Fiona, Wilson et al. (2008)**. Are misalignments of perceptions and self-efficacy causing gender gaps in entrepreneurial intentions among our nation's teens? *Journal of Small Business and Enterprise Development*, 15(2), 321-335. <http://dx.doi.org/10.1108/14626000810871709>
- [15]. **Krueger, N. F. and Brazeal, D. V. (1994)**. Entrepreneurial Potential and Potential Entrepreneurs. *Entrepreneurship Theory and Practice*, 18 (3): 91-104.
- [16]. **Levesque, M. and Minniti, M. (2006)**. The effect of aging on entrepreneurial behavior. *Journal of Business Venturing*, 21: 177-194.
- [17]. **Lewis, K. and Massey, C. (2003)**. Youth Entrepreneurship. In A. De Bruin, and A. Dupuis, *Entrepreneurship: new perspectives in a global age*. pp. 206-226. Aldershot, Hamps, Ashgate.
- [18]. **Mueller, S. L. & Dato-on, M. C. (2008)**. Gender role orientation as a determinant of Entrepreneurial self –efficacy. *Journal of Development Entrepreneurship*, 13(1), 3-20.
- [19]. **Rachid Zeffane (2013)**. Gender and Youth Entrepreneurial Potential: Evidence from the United Arab Emirates *International Journal of Business and Management*; Vol. 8, No. 1; 2013

[20]. **Robinson, P. B., Stimpson, D. V., Huefner, J. C., and Hunt, H. K. (1991).** An attitude approach to the prediction of entrepreneurship, *Entrepreneurship Theory and Practice*, 15, 13-31.

[21]. **Sánchez, J. C. (2011).** University training for entrepreneurial competencies: Its impact on intention of venture creation. *Int Entrep Mang J*, 7, 239-254.

[22]. **Shinnar, Rachel, O., Giacomini, & Frank, J. (2012).** Entrepreneurial Perceptions and Intentions: The Role of Gender and Culture. *Entrepreneurship Theory and Practice*, 36(3), 465-493.

[23]. <http://dx.doi.org/10.1111/j.1540-6520.2012.00509.x>

[24]. **Strobl, A., Christopher, K., & Mike, P. (2012).** Entrepreneurial attitudes and intentions: assessing gender specific differences. *International Journal of Entrepreneurship and Small Business*, 15(4), 452-468. <http://dx.doi.org/10.1504/IJESB.2012.046475>

[25]. **Wang, C. & Wong, P. (2004).** Entrepreneurial interest of university students in Singapore, *Technovation*, 24 (2), 161-172.

[27]. **Zaidatol Akmaliah Lope Pihie, & Afsaneh Bagheri. (2009).** Entrepreneurial Intention of University Students: An Analysis of Gender and Ethnic Groups. *International Journal of Knowledge, Culture and Change Management*, 9(4), 49-60. http://dx.doi.org/10.1207/s15326934crj1803_10

[28]. **Zissimopoulos, J. and Karoly, L. (2007).** Transitions to self-employment at older ages: The role of wealth, health, health insurance and other factors. *Labor Economics*, 14: 269-295.

Table -1 Descriptive Statistics

	Mean	Std. Deviation	N
ENT_INT	4.6814	1.09147	532
AGE	1.1786	.40718	532
INCOME	2.3966	.71744	532
GENDER	1.4079	.49191	532
FATH_OCCUP	2.3308	.98937	532
MO_OCCUP	3.3383	1.19722	532
BUSN_BACK	1.6316	.48283	532
QUALI	3.3910	1.12218	532

Table-2 Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	QUALI, BUSN_BACK, GENDER, AGE, MO_OCCUP, INCOME, FATH_OCCUP ^b		Enter

a. Dependent Variable: ENT_INT

b. All requested variables entered.

Study Model

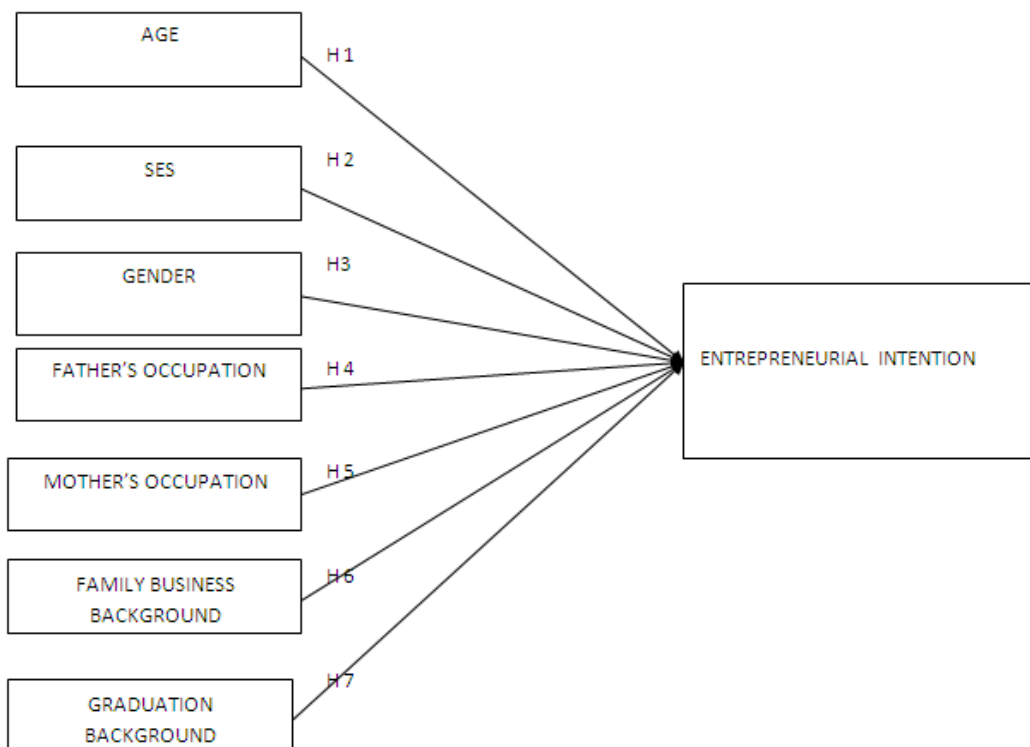


Figure-1

Table-3 Pearson Correlation Coefficients

		Correlations								
		ENT_INT	AGE	INCOME	GENDER	FATH_OCCU P	MO_OCCUP	BUSN_BAC K	QUALI	
ENT_INT	Pearson Correlation	1								
AGE	Pearson Correlation	.077	1							
INCOME	Pearson Correlation	-.065	.047	1						
GENDER	Pearson Correlation	-.051	-.157**	-.166**	1					
FATH_OCCU P	Pearson Correlation	.210**	.101*	-.127**	.063	1				
MO_OCCUP	Pearson Correlation	.156**	-.059	-.157**	.075	.233**	1			
BUSN BACK	Pearson Correlation	-.242**	.010	-.132**	-.040	-.474**	-.175**	1		
QUALI	Pearson Correlation	-.099*	.065	.064	.048	.033	-.043	-.005	1	
** . Correlation is significant at the 0.01 level (2-tailed).										
* . Correlation is significant at the 0.05 level (2-tailed).										