



PREDICTING THE ENTREPRENEURIAL INTENTION OF FEMALE UNIVERSITY STUDENTS: A STUDY OF PUBLIC UNIVERSITIES IN PUNJAB

Ms. Prabhjot Kaur

Ex. Assistant Professor, Khalsa College for Women, Ludhiana

ABSTRACT

Entrepreneurial intention plays a pivotal role in an individual's decision to set up a new business. Taking into consideration the emphasis laid by the policymakers to foster the entrepreneurial intentions among the youth an examination of their entrepreneurial intention needs to be done. The aim of the present paper is exploring and predicting the antecedents of entrepreneurial intentions of female university students in public universities of Punjab. A customized instrument to measure entrepreneurial intention was developed. The reliability and validity of the instrument was established using confirmatory factor analysis. A sample of 330 female students from public universities in Punjab was drawn and structural equation modeling was used to study the relative importance of antecedents of entrepreneurial intention. The findings revealed that attitude towards the behavior; perceived behavioral control and entrepreneurial education had a significant impact on the entrepreneurial intention. The present study contributes to the existing literature on entrepreneurial intention by incorporating entrepreneurial education and extending the theory of planned behavior.

Keywords:- Entrepreneurship; Entrepreneurial intentions; Structural Equation Modeling; Theory of Planned Behavior.

1. Introduction

Policymakers worldwide are making persistent efforts in fostering an entrepreneurship driven economy in order to enhance their economic growth by creating more jobs, advancing social interests and increasing competition (European Commission, 2003). One of the reasons for such efforts on promoting entrepreneurship is the rising unemployment issues among the educated youth. If the youth opts to be self employed, these unemployment problems among the youth can be curbed effectively. The knowledge and the skills required for establishing a startup are present in most of the educated youth. However only a very small fraction of this section choose to be self employed.

There is no doubt that the literature on this topic is rich with a wide number of studies in this area (eg. Krueger et al. (2000); Shapero and Sokol's (1982); Learned (1992); Naffziger et al. (1994); Segal et al (2005)). However, very limited studies in this area have actually laid emphasis on identifying the antecedents of entrepreneurial intentions of female university students and predicting the relative importance of these antecedents particularly for a specific group of students (i.e females in this study). Additionally the existing studies have laid emphasis on predicting entrepreneurial intentions only in the developed countries (Jones et al. (2008); Schwalb et al. (1988)).

Therefore, taking into consideration the role of entrepreneurship in fostering economic growth and promoting healthy competition in the economy, this particular paper aims to identify the important antecedents of entrepreneurial intentions and then finally predicting entrepreneurial intentions of the female students of public universities in Punjab. This study will act as a foundation and a springboard for all the future studies in this area that will be conducted in a developing country. The findings of the study will be relevant for academicians, researchers and policy makers as it will give an insight into the psychology of prospective female entrepreneurs and thus take actions to nurture and promote entrepreneurship in Punjab as well as other states in India.

The rest of the paper is organized as follows. The second section of the paper covers the theoretical background of the study, followed by the proposed conceptual model and hypothesis

in the third section. The fourth section discusses the need of the study followed by research methodology in the fifth section. Research methodology section is followed by the data analysis, results and discussions section. Finally conclusion and implications comprises the seventh section.

2. Theoretical Background

This section that reviews the contribution of the previous studies is classified into two sections: entrepreneurial intentions and attitude behavior theory.

2.1 Entrepreneurial Intentions

The decision to start a new business always follows the intention to do so. According to Linan (2008) all the models of entrepreneurial intention are based on this assumption only that entrepreneurial behavior always follows an entrepreneurial intention. Bird (1988) defines Entrepreneurial Intention (EI) as a cognizant state of mind that directs an individual's focus towards a specific goal or the means of attaining it. Fishbein and Ajzen (1975) in their seminal work opined that the most direct predictor of an individual's actual behavior is the individuals' intention to do so. Further Ajzen (1991) explained it as a measure of degree of motivation to perform a particular task. The more stronger the intention to undertake a particular behavior, the higher is the probability of actually undertaking that behavior. Krueger *et al.* (2000) in his study took it as a base and explained that undertaking entrepreneurship as a career option is a planned behavior that has been built upon an individual's intention to do so. In this particular study, entrepreneurial intention refers to the intention of a female university student to start her new business.

2.2 Attitude Behavior Theories

Fishbein and Ajzen (1975) in their seminal work held that a system of beliefs, attitudes and intentions precede the actual behavior of an individual. Based on this work Ajzen and Fishbein (1980) came out with a proposition that an individual's perception about the consequences of a particular behavioral action would influence the individual's attitude towards that behavioral action. This proposition came to be known as the Theory of Reasoned Action (TRA). The individual's attitude towards a particular behavior influences the individual's intention to perform that behavior. Further the level of intensity of an individual's intention has an impact on

the actual behavior of the individual. In addition to the attitude towards the behavior the TRA proposed that subjective norms also have an impact on the individual's intentions to perform an action. According to Fishbein and Ajzen (1975), subjective norm refers to the opinion of the important individual's (family, friends and peers) in an individual's life about the particular behavioral action. Such an opinion of the friends and family members has a great influence in some cases on an individual's behavioral intentions. The applicability of TRA has been validated by various researches in diverse fields (Hale, Householder & Greene 2002). However the theory has some limitations. Firstly the applicability of subjective norms has been found to be weak in certain situations (Davis, FD, Bagozzi & Warshaw 1989). Secondly the intentions of an individual may vary with time and may be influenced by some unrelated events which have not been accounted for so far (Sheppard, Hartwick & Warshaw 1988).

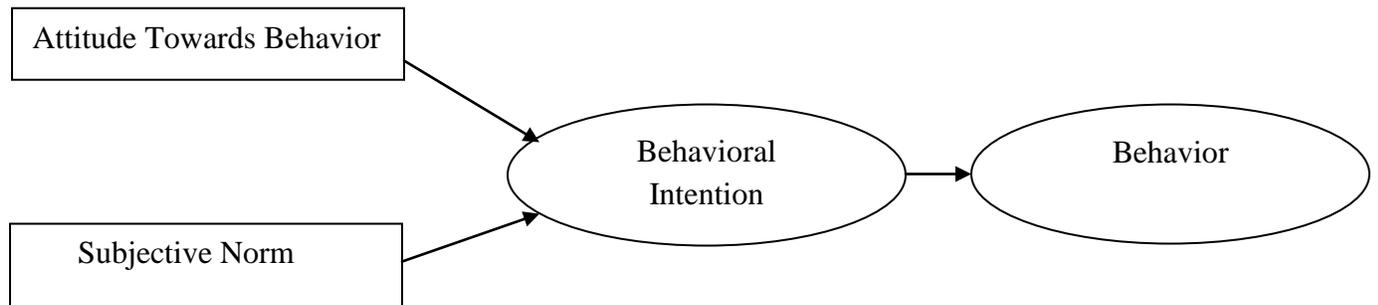


Figure 1: Theory of Reasoned Action (Ajzen and Fishbein 1980)

In order to address the above mentioned limitations of Theory of Reasoned Action(TRA), Ajzen (1985) introduced the Theory of Planned Behavior as an extension of the TRA model. Like TRA the TPB also is based on the assumption that an individual's behavioral intentions guide the actual behavioral actions of the individuals. The Theory of Planned Behavior (TPB) take into account the two antecedents of intentions given in the TRA model, i.e attitude towards the behavior and subjective norms. In addition one more antecedent of intention is introduced in the form of perceived behavioral control. According to (Bandura, Adams & Beyer 1977; Bandura, Adams, Hardy & Howells 1980) an individual's behavioral intentions are dependent upon one's ability and confidence to perform that action. The additional antecedent of intentions in this

case, i.e, the perceived behavioral control is defined as one's beliefs and confidence regarding the essentials (such as time, skills, funds, etc.) required to perform a particular behavioral action.

Theory of Planned behavior has been widely applied in diverse fields. The theory has found application in varied contexts such as intentions for condom use (Reinecke, Schmidt & Ajzen 1996). Paiselry and Sparks (1998) applied this model to predict the intentions of individuals to consume low-fat food products. Norman, Conner, Bell (1999) used this model to predict the intentions of individuals to quit smoking. However, Mathieson, Peacock and Chin (2001) have alarmed the researchers regarding unthoughtful applicability of TPB in different contexts. They advocate the customization of instruments of TPB as per the context in which it is to be used.

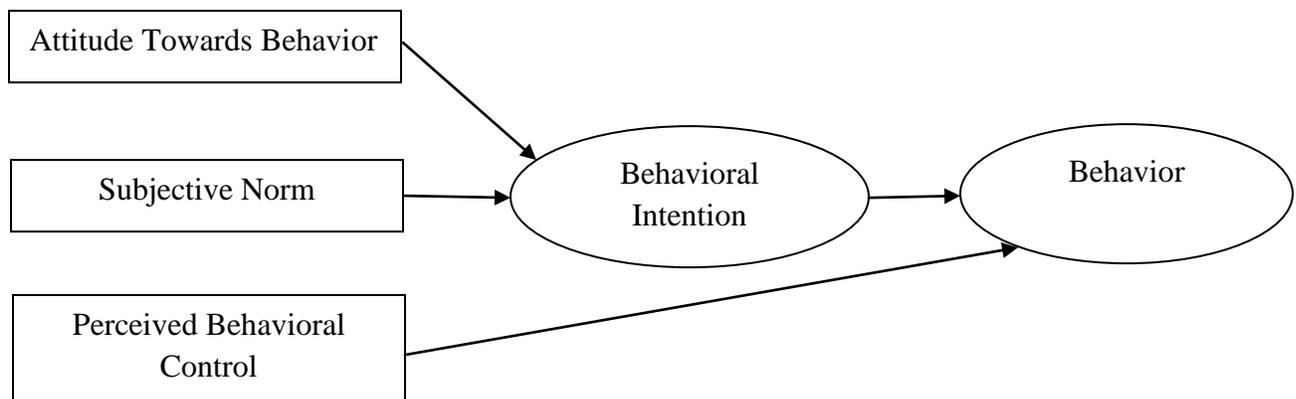


Figure 2: Theory of Planned Behavior (Ajzen (1985))

A brief review of literature that deals with entrepreneurial intentions (particularly of university students) has been shown in the table 1 that follows.

Table 1: Summary of studies on Entrepreneurial Intentions of Students

Author (Year)	Educational Level	Country of study	Sample Size
Lena and Wong (2003)	Undergraduate	Singapore	11,660
Franke and Luthje (2004)	Undergraduate	Austria, USA, Germany	1,313
Segal et al. (2005)	Undergraduate	USA	115
Guroi and Atsan (2006)	Undergraduate	Turkey	400
Giacomin et al. (2010)	Undergraduate and postgraduate	USA, China, India, Spain, Belgium	2093

3. Proposed Conceptual Model and Hypothesis

Based on the literature review, the following conceptual model has been proposed by the authors

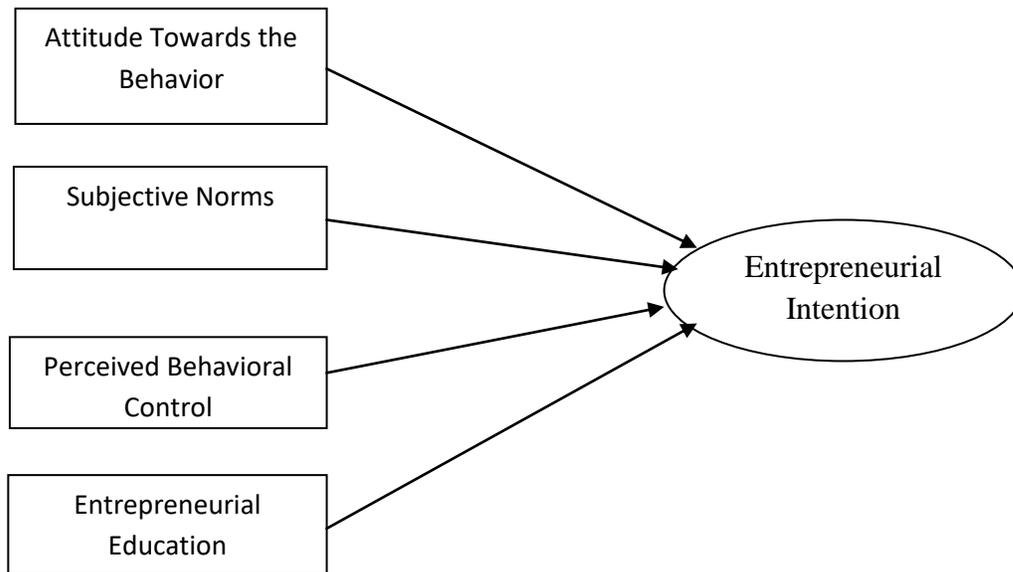


Figure 3: Proposed Conceptual Model

The authors proposed the following Hypothesis to be tested.

H1: Attitude towards the behavior has a significant positive effect on the entrepreneurial intentions of the students.

H2: Subjective norms have a significant positive effect on the entrepreneurial intentions of the students.

H3: Perceived behavioral control has a significant positive effect on the entrepreneurial intentions of the students.

H4: Entrepreneurial Education has a significant positive effect on the entrepreneurial intentions of the students.

4. Need of the Study

Entrepreneurship has become a key topic for research these days. The main reason of this is the ever increasing demand for new entrepreneurs who play a vital role in the economic development of a country and promote a spirit of competitiveness in the economy. Therefore persistent efforts are being made by the policy makers all over the world to promote entrepreneurial activities within their respective countries. There have been a number of studies in this area ,eg., Krueger et al. (2000; Shapero and Sokol's (1982); Frank et al. (2007); Learned, (1992); Naffziger et al. (1994); Segal et al. (2005), etc. However, in the prior studies in this area there are very limited studies that have actually laid emphasis on identifying the antecedents of entrepreneurial intentions of female university students and predicting the relative importance of these antecedents. Moreover a majority of these studies have been limited to predicting entrepreneurial intentions only in the developed countries Jones et al. (2008); Schwalb et al. (1988); Wu and Wu (2008). The paper extends research on student's entrepreneurship intentions by providing an insight on how the antecedents on entrepreneurial intention impact the entrepreneurial intentions of the female university students.

5. Research Methodology

5.1 Research Design

The research design for this study is descriptive in nature as the authors have the objective of identifying the relevant antecedents of entrepreneurial intentions of female university students and predicting their relevant importance. The proposed research area for the study is the Punjab and Chandigarh as the authors focused on the three largest public funded government universities of Punjab (a) Panjab University, Chandigarh (b) Punjabi University, Patiala (c) Guru Nanak Dev University, Amritsar.

5.2 Sampling

5.2.1 Sampling Unit

The sampling unit for the study will be a female individual student who is in the final year of her postgraduate management study program in one of the three selected public universities in Punjab and Chandigarh. An individual female postgraduate management student has been selected because they have a strong foundation for business acumen and presently they are at a critical position of planning and selecting their future career path (Ahmed et al., 2010; Zain et al., 2010).

5.2.2 Sample Size

The sample size for the study is 270 students. Hair et al. (2010) have stated that sample sizes between 200 and 300 would be appropriate for using structural equation modeling.

5.2.3 Sampling Techniques

Systematic Random Sampling was used to select the eligible respondents out of the total population of final year postgraduate management students of Panjab University (Chandigarh), Punjabi University (Patiala) and Guru Nanak Dev University (Amritsar).

5.3 Data collection Tools and Techniques

The data was collected using a questionnaire which consisted of items from different standardized scales (Refer Table 1). The questionnaire comprised of two sections namely Section

I and Section II. Section I contained questions relating to the demographic profile of the respondents and Section II consisted of items relating to 4 dependent variables ((attitude toward the behavior, subjective norm, perceived behavioral control, entrepreneurship education) and one dependent variable (entrepreneurial intention). All the constructs were measured on a 5 point Likert scale.

Table 1 : Details of Constructs and Item Selection

S.No.	Construct	Items Adopted From
1.	Attitude Toward Behavior	Linan and Chen (2009); Paco et al. (2011); Nishantha (2009); Sagiri and Appolloni (2009)
2.	Subjective Norms	Gurbuz and Aykol (2008); Leroy, Maes, Sels and Debrulle (2009); Leong (2008).
3.	Perceived Behavioral Control	Linan and Chen (2009); Dohse and Walter (2010); Paço et al. (2011)
4.	Entrepreneurial Education	Ooi et al. (2011); Lee et al. (2005); Selvarajah and Meyer (2011)
5.	Entrepreneurial Intention	Linan and Chen (2009); Leong (2008)

Pilot Test

A pilot test of the questionnaire was undertaken on a small sample set of 30 students to identify and correct any deficiencies in the questionnaire. Reliability test of all the items was undertaken and the cronbach alpha for all the items were in the range of (0.840 to 0.943) which is quite satisfactory as the cronbach's alpha in all the cases was greater than 0.7 (Hair et. Al 2006). The result of pilot test has been summarized in the table 2 below:

Table 2: Reliability Analysis during Pilot Test

S.No.	Constructs	Number of Items	Cronbach's alpha
1.	Attitude Towards Behavior	5	0.886
2.	Subjective Norm	5	0.925
3.	Perceived Behavioral Control	6	0.943
4.	Entrepreneurial Education	4	0.906
5.	Entrepreneurial Intention	5	0.840

6. Data Analysis Results and Discussions

The data was analyzed using covariance based Structural Equation Modeling (SEM) on PASW 18 and AMOS 18. According to Landis et al. (2000) SEM analysis provides for the simultaneous assessment of both reliability and validity of the constructs. Construct reliability and validity has a direct effect on the substantive model being tested. Therefore, before going to the hypothesis testing the reliability and the validity of the construct is checked in the confirmatory factor analysis (Bagozzi and Edwards, 1998). After establishing the reliability and validity of the constructs in the measurement model we move further with the final hypothesis testing using structural model.

6.1 Measurement Model

The validity of a construct refers to the degree to which the measured or the observed items actually reflect the unobserved or the latent construct. Construct validity is examined through convergent validity and discriminant validity. Further, convergent validity gets established through three different ways:

- (1) Factor loadings should be greater than 0.70 (Hair et al., 2006)
- (2) Average Variance Extracted should be greater than 0.50 (Fornell and Larcker, 1981)
- (3) Composite reliability should be greater than 0.70 (Hair et al., 2006)

Convergent validity gets established as the majority of the factor loadings were than 0.70 (Hair et al., 2006). The factor loading of the last statement in entrepreneurial intention construct was less than 0.70 and therefore it was not considered for further analysis. The average variance extracted of the constructs ranged from 0.530 to 0.733 and was above the threshold of 0.50 (Fornell and Larcker, 1981). The composite reliability of all the five constructs was in the range of 0.848 to 0.942 and was above the threshold of 0.70 (Hair et al., 2006).

Furthermore, discriminant validity has been assessed by comparing AVE with the squared correlation between the constructs (Fornell and Larcker, 1981). For example, squared correlation between attitude towards the behavior and subjective norms is 0.352 but its AVE is higher (0.719), thus proving discriminant validity. Similarly, as all of squared correlations between pair

of constructs came to be less than AVE (Table 4), discriminant validity gets established (Ok et al., 2005).

The initial CFA, with all latent factors modeled simultaneously as correlated first-order factors, indicated a reasonable model fit, $\chi^2/df = 1.757$, $p < .05$, goodness-of-fit index (GFI) = .881, AGFI = 0.855, comparative fit index (CFI) = .959, Tucker–Lewis index (TLI) = .953, root mean square error of approximation (RMSEA) = .053. Thus, CFA confirms our preconceived measurement theory through construct validity and acceptable model fit indices. The graphical representation of measurement model has been given in figure 4.

Table 3: Results of Measurement Model (Confirmatory Factor Analysis)

Constructs	Items	Convergent Validity		
		Factor Loadings	AVE	CR
Attitude Towards Behavior (ATB)	ATB1	0.708	0.617	0.889
	ATB2	0.877		
	ATB3	0.780		
	ATB4	0.805		
	ATB5	0.746		
Social Norms	SN1	0.771	0.719	0.927
	SN2	0.862		
	SN3	0.895		
	SN4	0.858		
	SN5	0.849		
Perceived Behavioral Control	PBC1	0.809	0.716	0.942
	PBC2	0.881		
	PBC3	0.915		
	PBC4	0.932		
	PBC5	0.826		
	PBC6	0.761		
Entrepreneurial Education	EE1	0.783	0.733	0.909
	EE2	0.874		
	EE3	0.842		
	EE4	0.876		
Entrepreneurial Intention	EI1	0.756	0.530	0.848
	EI2	0.754		
	EI3	0.770		
	EI4	0.753		
	EI5	0.590		

Table 4 : Results of Discriminant Validity

	ATB	SN	PBC	EE	EI
ATB	0.785				
SN	0.352	0.848			
PBC	0.354	0.257	0.856		
EE	0.541	0.226	0.586	0.845	
EI	0.457	0.236	0.515	0.521	0.728

Note. The boldfaced diagonal elements are the square root of the variance shared between the constructs and their measures. Off-diagonal elements are the correlations between constructs

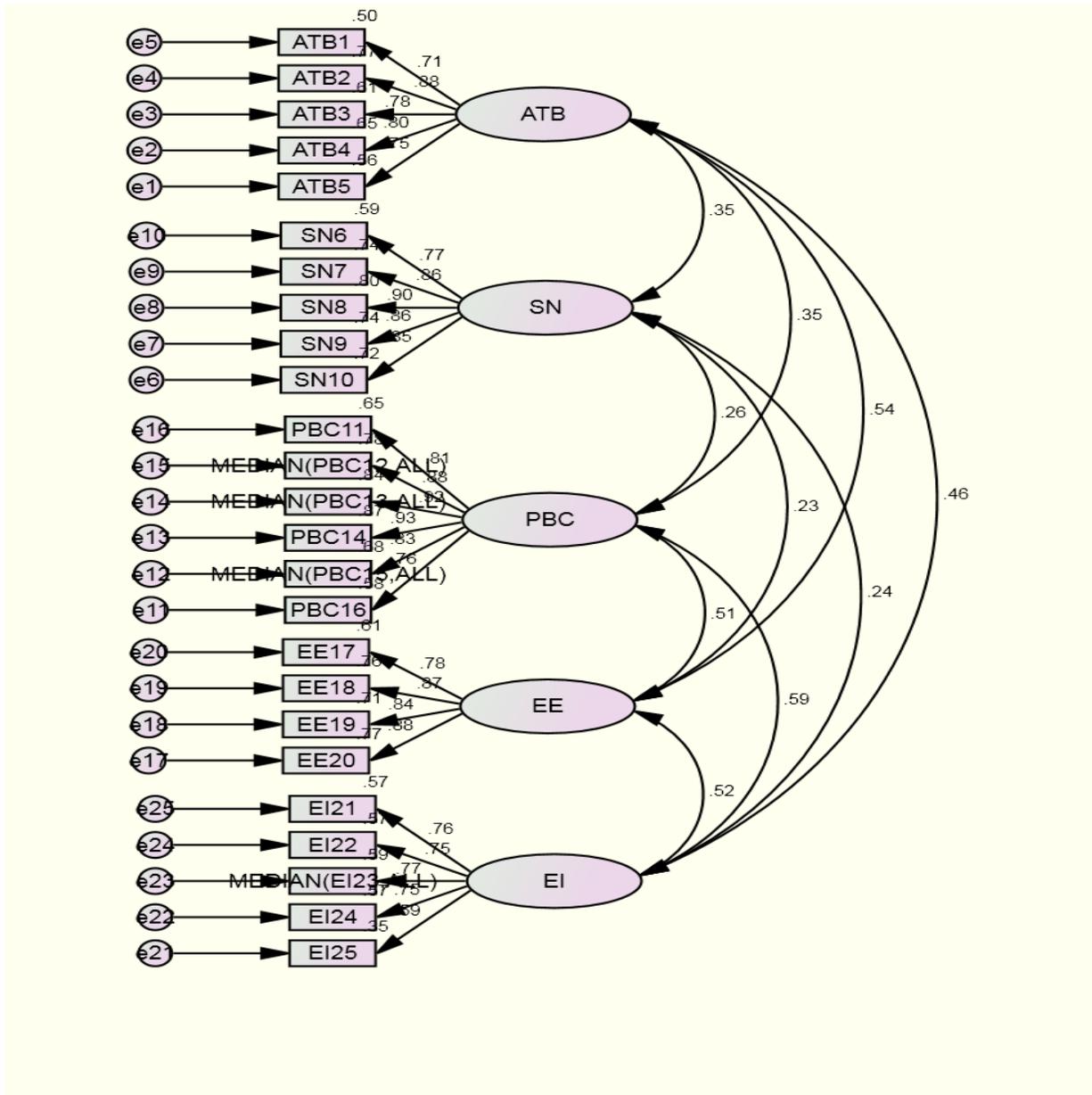


Figure 4: Measurement Model

6.2 Structural Model

A Path analysis model was proposed with five constructs that included four exogenous or independent variables (attitude towards the behavior, subjective norms, perceived behavioral control and entrepreneurial education) and one endogenous or dependent variable (entrepreneurial intention). The model proposed that attitude towards behavior; subjective norms; perceived behavioral control and entrepreneurial education had a positive influence on

the entrepreneurial intention of the students. After the CFA achieved the requisite model fit and reliability and validity of the construct was accomplished, the factor scores of the five unobserved variables were imputed into the SPSS data file. Using these factor scores a path model was established on AMOS 18 and Path Analysis was run. The result of the path analysis has been shown in the diagram below.

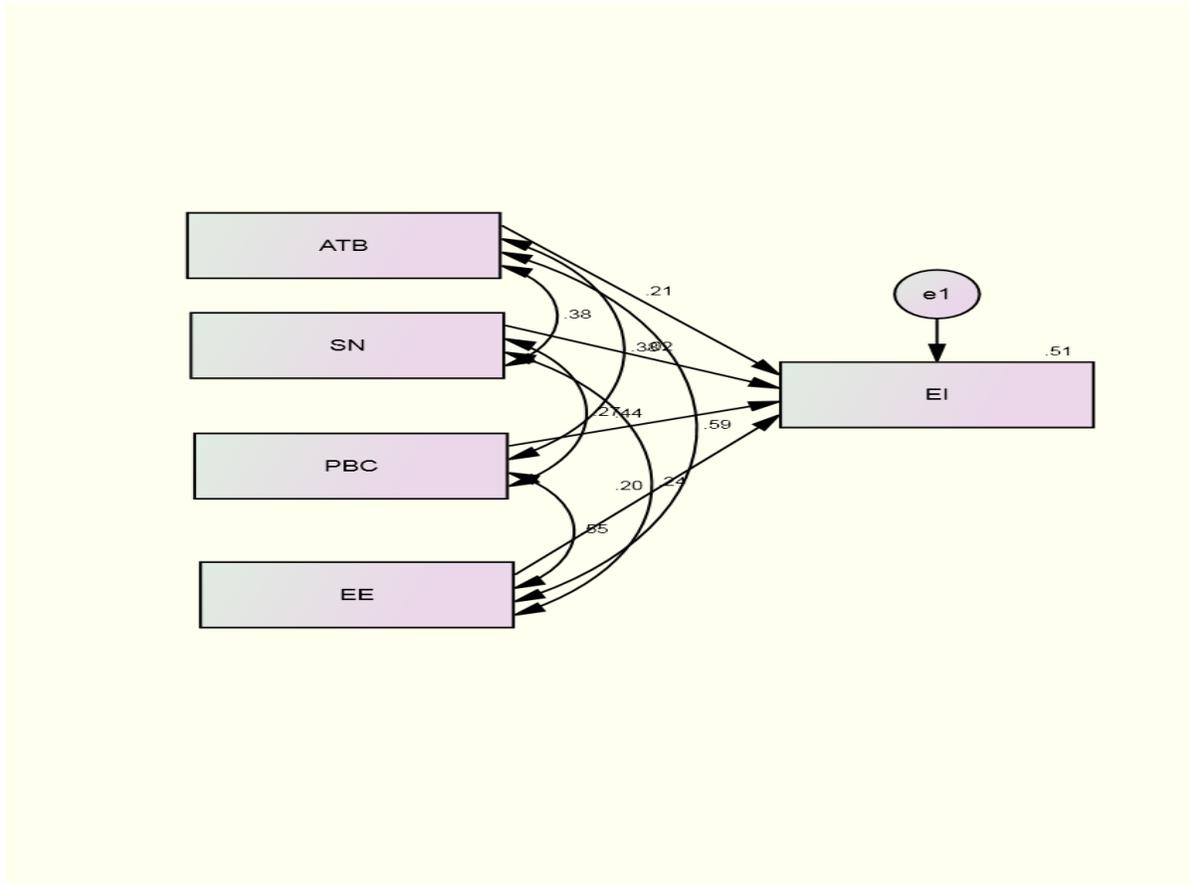


Figure 4: Estimations of Path Analysis Model

The path analysis model also, indicated a reasonable model fit, $cmin/df = 1.919$, $p < .05$, goodness-of-fit index (GFI)= 0.848, comparative fit index (CFI) = .958, root mean square error of approximation (RMSEA) = .054.

All the four exogenous variables together explained 51% of variations in the entrepreneurial intentions of the students. The details of the beta scores and their corresponding p values of different paths have been shown in the table no. 5 below:

Table 5: Analysis of Proposed Hypothesis

S.No.	Hypothesis	Evidence (Beta, Pvalue)	Result
H1	Attitude towards the behaviour positively effect entrepreneurial intentions of the female students.	Beta- 0.149 Pvalue- 0.001	Supported
H2	Subjective norms positively effect entrepreneurial intentions of female students.	Beta- 0.016 Pvalue- 0.636	Not Supported
H3	Perceived behavioral control positively effect entrepreneurial intentions of female students.	Beta- 0.398 Pvalue- 0.000	Supported
H4	Entrepreneurial education positively effect entrepreneurial intentions of female students.	Beta- 0.143 Pvalue- 0.001	Supported

The regression weight for the first hypothesis (*H1: Attitude towards the behavior positively effect the entrepreneurial intentions of the female students*) is 0.149 and the corresponding p value is significant at 1%. This means that attitude towards the behavior has a significant impact on the entrepreneurial intention of the final year female postgraduate management students. The regression weight for the second hypothesis (*H2: Subjective norms positively effect entrepreneurial intentions of the female students*) is 0.016 and the corresponding p value is insignificant at both 1% and 5%. Therefore, it can be said that subjective norms does not have a significant impact on the entrepreneurial intentions of final year female postgraduate management students in Punjab. The regression weight for the third hypothesis (*H3: Perceived behavioral control positively affects entrepreneurial intentions of students*) is 0.398 and the corresponding p value is significant at 1%. Therefore, the results support our third hypothesis and it can be said that perceived behavioral control has a significant positive effect on entrepreneurial intentions of our respondents. Similarly the regression weight for the fourth hypothesis (*H4: Entrepreneurial education positively affects entrepreneurial intentions of female students*) is 0.143 and the corresponding p value is significant at 1%. Therefore our fourth hypothesis also gets accepted and it can be said that entrepreneurial education positively affects entrepreneurial intentions of university students in Punjab.

7. Conclusion and Implications

This study had made an understanding on the variables (attitude toward the behavior, subjective norm, perceived behavior control, entrepreneurship education) that affect female student's entrepreneurial intention. Previously, most of the research in this area has been conducted only in developed countries. This paper is an attempt to identify and analyze the relative importance of antecedents of female student's entrepreneurial intention in a developing country India. The focus area for this study has been the state of Punjab and Chandigarh that are well know business-hubs in northern India. The study highlighted that attitude toward the behavior, perceived behavioral control and exposure to entrepreneurial education has a positive impact on female student's entrepreneurial intentions. The favorable relationship of entrepreneurial education with student's entrepreneurial intentions is a valuable insight for policy makers in the Ministry of Human Resource Development of India to introduce more formal entrepreneurial courses in educational curriculum. Also it must work towards creating a more holistic entrepreneurial development programs through specialized institutions. In order to facilitate new venture creation for younger generation, government shall provide the funds and supporting infrastructures, as well as removing the impediments in the entrepreneurial career path (Bagheri & Pihie, 2011). Once they have the knowledge about entrepreneurship, this will encourage them to be self-employed (Gelard & Saleh, 2010). This is also consistent with the policy initiative of Skill India in the country as an attempt is being made to empower youth with skills that may help them in self-employment.

REFERENCES

- Bhagwati, Jagdish, and T.N. Srinivasan. 2002. "Trade and Poverty in the Poor Countries" American Economic Review 92(2), 180-3.
- Ahmed, I., Nawaz, M. M., Ahmad, Z., Shaukat, M. Z., Usman, A., Rehman, W. U., & Ahmed, N. 2010. "Determinants of Students' Entrepreneurial Career Intentions: Evidence from Business Graduates". European Journal of Social Sciences, 15(2), 14-22
- Ajzen, I. 1991, "The theory of planned behavior". Organizational behavior and human decision processes, 50(2), 179-211.

- Ajzen, I., & Fishbein, M. 1980. *“Understanding attitudes and predicting social behavior”*. Englewood Cliffs, NJ: Prentice-Hall.
- Bagheri, A., & Pihie, Z. A. 2011. *“On becoming an entrepreneurial leader: a focus on the impacts of university entrepreneurship programs”*. American Journal of Applied Sciences, 8(9), 884.
- Bagozzi, R. P., & Edwards, J. R. 1998. *“A general approach for representing constructs in organizational research”*. Organizational research methods, 1(1), 45-87.
- Bandura, A., Adams, N. E., & Beyer, J. 1977. *“Cognitive processes mediating behavioral change”*. Journal of personality and social psychology, 35(3), 125.
- Bandura, A., Adams, N. E., Hardy, A. B., & Howells, G. N. 1980. *“Tests of the generality of self-efficacy theory”*. Cognitive therapy and research, 4(1), 39-66.
- Bird, B. 1988. *“Implementing entrepreneurial ideas: The case for intention”*. Academy of management Review, 13(3), 442-453.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. 1989. *“User acceptance of computer technology: a comparison of two theoretical models”*. Management science, 35(8), 982-1003.
- Dohse, D., & Walter, S. G. 2010. *“The role of entrepreneurship education and regional context in forming entrepreneurial intentions”*. (No. 2010, 18). Document de treball de l'IEB.
- Fishbein, M. and Ajzen, I. 1975. *“Belief, Attitude, Intention, and Behaviour: An Introduction to Theory and Research”*.
- Fornell, C., & Larcker, D. F. 1981. *“Structural equation models with unobservable variables and measurement error: Algebra and statistics”*. Journal of marketing research, 382-388.
- Franke, N., & Lüthje, C. 2004. *“Entrepreneurial intentions of business students—A benchmarking study”*. International Journal of Innovation and Technology Management, 1(03), 269-288.
- Gelard, P., & Saleh, K. E. 2010. *“A Model of Entrepreneurship Centers in Islamic Azad University South Tehran Branch”*. In Proceedings of the 1st International Conference on Entrepreneurship (p. 17).
- Giacomin, O., Janssen, F., Pruett, M., Shinnar, R. S., Llopis, F., & Toney, B. 2011. *“Entrepreneurial intentions, motivations and barriers: Differences among American, Asian and European students”*. International Entrepreneurship and Management Journal, 7(2), 219-238.
- Gurbuz, G., & Aykol, S. 2008. *“Entrepreneurial intentions of young educated public in Turkey”*. Journal of Global Strategic Management, 4(1), 47-56.

- Gürol, Y., & Atsan, N. 2006. “*Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey*”. *Education+ Training*, 48(1), 25-38.
- Hair Jr JF, Black WC, Babin BJ, Anderson R, Tatham R. 2006. “*Multivariate data analysis*”. 6th ed. Upper Saddle River: Prentice Hall;
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. 2010. “*Multivariate data analysis: A global perspective*” (Vol. 7). Upper Saddle River, NJ: Pearson.
- Hale, J. L., Householder, B. J., & Greene, K. L. 2002. “*The theory of reasoned action*”. *The persuasion handbook: Developments in theory and practice*, 259286.
- Jones, P., Jones, A., Packham, G. and Miller, C. 2008. “*Saaatudent attitudes towards enterprise education in Poland: a positive impact*”, *Education + Training*, Vol. 50 No. 7, pp. 597-614
- 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).
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. 2000. “*Competing models of entrepreneurial intentions*”. *Journal of business venturing*, 15(5), 411-432.
- Landis, R. S., Beal, D. J., & Tesluk, P. E. 2000. “*A comparison of approaches to forming composite measures in structural equation models*”. *Organizational Research Methods*, 3(2), 186-207.
- Learned, K. E. 1992. “*What happened before the organization? A model of organization formation*”. *Entrepreneurship: theory and practice*, 17(1), 39-49.
- Lee, L., & Wong, P. K. 2003. “*Attitude towards entrepreneurship education and new venture creation*”. *Journal of Enterprising Culture*, 11(04), 339-357.
- Lee, S. M., Chang, D., & Lim, S. B. 2005. “*Impact of Entrepreneurship Education: A Comparative Study of the U.S. and Korea*”. *International Entrepreneurship and Management Journal* 1, 27–43.
- Leong, C. K. 2008. “*Entrepreneurial Intention: An Empirical Study Among Open University Malaysia Students*”. *Dessertation, Open University Malaysia Center for Graduate Studies*.
- Leroy, H., Maes, J., Meuleman, M., Sels, L., & Debrulle, J. 2009. “*Gender effect on entrepreneurial intentions. A TPB multi-group analysis at factor and indicator level*”.
- Linan, F. 2008. “*Skill and value perceptions: how do they affect entrepreneurial intentions?*” *International Entrepreneurship and Management Journal*, 4(3), 257-272.

- Liñán, F., & Chen, Y. W. 2009. "Development and Cross-Cultural application of a specific instrument to measure entrepreneurial intentions". *Entrepreneurship theory and practice*, 33(3), 593-617.
- Mathieson, K., Peacock, E., & Chin, W. W. 2001. "Extending the technology acceptance model: the influence of perceived user resources". *ACM SigMIS Database*, 32(3), 86-112.
- Naffziger, D. W., Hornsby, J. S., & Kuratko, D. F. 1994. "A proposed research model of entrepreneurial motivation". *Entrepreneurship: Theory and Practice*, 18(3), 29-43.
- Nishantha, B. 2009. "Influence of Personality Traits and Socia-demographic Background of Undergraduate Students on Motivation for Entrepreneurial Career: The Case of Sri Lanka". *49(2)*, 71-82.
- Norman, P., Conner, M., & Bell, R. 1999. "The theory of planned behavior and smoking cessation". *Health psychology*, 18(1), 89.
- Ooi, Y. K., Selvarajah, C., & Meyer, D. 2011. "Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students". *International Journal of Business and Social Social Science*, 2(4), 206-220.
- Paço, A. M. F., Ferreira J. M., Raposo, M., Rodrigues, R. G., & Dinis, A. 2011. "Behaviours and entrepreneurial intention: Empirical findings about secondary students". *Journal of International Entrepreneurship*, 9, 20-38.
- Paisley, C. M., & Sparks, P. 1998. "Expectations of reducing fat intake: The role of perceived need within the theory of planned behavior". *Psychology and Health*, 13(2), 341-353.
- Reinecke, J., Schmidt, P., & Ajzen, I. 1996. "Application of the theory of planned behavior to adolescents' condom use: A panel study." *Journal of applied social psychology*, 26(9), 749-772.
- Sagiri, S., & Appolloni, A. 2009. "Identifying the Effect of Psychological Variables on Entrepreneurial Intentions." *DSM Business Review*, 1(2), 61-86.
- Schwalb, M.M., Grosse, R. and Simpson, E.R. 1988, "Developing entrepreneurs in developing countries – The PEG Programme in Peru", *Journal of Management Development*, Vol. 7 No. 4, pp. 31-40.
- Segal, G., Borgia, D., & Schoenfeld, J. 2005. "The motivation to become an entrepreneur". *International journal of Entrepreneurial Behavior & research*, 11(1), 42-57.
- Segal, G., Borgia, D., & Schoenfeld, J. 2005. "The motivation to become an entrepreneur". *International journal of Entrepreneurial Behavior & research*, 11(1), 42-57.

Shapero, Albert and Sokol, Lisa. 1982. “*The Social Dimensions of Entrepreneurship*”. Encyclopedia of Entrepreneurship, p. 72-90. Available at SSRN: <https://ssrn.com/abstract=1497759>.

Sheppard, B. H., Hartwick, J., & Warshaw, P. R. 1988. “*The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research*”. Journal of consumer research, 15(3), 325-343.

Zain, Z. M., Akram, A. M., & Ghani, E. K. 2010. “*Entrepreneurship Intentions Among Malaysian Business Students*”. Canadian Social Science, 6(3), 34-44.