

# ENTREPRENEURSHIP SEMINAR LEARNING EXPERIENCE AND ENTREPRENEURIAL INTENTION CHANGE AMONG MALAYSIAN NASCENT ENTREPRENEURS

Fauziah Pawan \*

Faculty of Business Management

Universiti Teknologi MARA (UiTM), Shah Alam, Selangor, Malaysia

Tel: +60- 012-3967050; Fax: +603-55225430

Email addresses: [fauziah932@salam.uitm.edu.my](mailto:fauziah932@salam.uitm.edu.my)

Zainab Ahmad

Faculty of Business Management

Universiti Teknologi MARA (UiTM), Shah Alam, Selangor, Malaysia

[zainab687@salam.uitm.edu.my](mailto:zainab687@salam.uitm.edu.my)

## **Abstract**

*Drawing on the Theory of Planned Behavior, this study examines the effect of entrepreneurship seminar learning experience on entrepreneurial intention change of nascent entrepreneurs. This is necessary in order to gauge how participation and learning in short duration seminars may impact on nascent intentions to create a new venture- an important outcome for both the entrepreneur and policy makers. The study's results show that entrepreneurial intention does change significantly in the course of the short duration seminar. The study also shows a positive learning experience and elevated levels of new knowledge and information among the seminar participants. In spite of this, the study's results do not indicate that the learning experience has any significant impact on the intention change recorded. The findings contribute to the theories of planned behavior and entrepreneurial intention and have wider implications on the utilization of short duration seminars as a policy tool in nascent entrepreneur training and development.*

**Keyword :** *nascent entrepreneurial intention; entrepreneurship seminar learning experience*

## **1. Introduction**

This paper is drawn from a study to examine the impact of participating in a short duration entrepreneurship seminar on new venture creation intentions of nascent entrepreneurs.

The study is built on the understanding that new entrepreneurial ventures created by individuals or groups of individuals are vital catalysts for economic growth and vibrancy (Sternberg & Wennekers, 2005; GEM 2009). In light of this, many governments have installed policies, strategies and tools that aim to support and aid the entrepreneurial new venture creation process. While research literature show that such policy-support is important, the literature is also clear that new entrepreneurial venture creation is very much a personal journey lodged deeply in the individual's psyche (Baron, 1998; Krueger, 2000; Mitchell, Busenitz et al, 2007). The latent literature stresses that venture creation is a form of behavior outcome that is both planned and purposeful as oppose to being random outcomes or passive byproducts of environmental conditions (Gartner, 1985; Shaver & Scott, 1991; Shook et al, 2003).

Empirical evidence also show that the entrepreneurial venture creation process is strongly driven by the individual's cognitive intention to create an own new venture as a means to capitalize on a viable opportunity. In fact, empirical evidence indicates that the birth of a new venture is not only preceded but is also best predicted by the individual's intention to create such an entity (Bird, 1992; Gartner, 1985; Learned, 1992).

Literature notes that behavioral intentions are constantly evolving and much about how intentions are formed, realized or changed has to do with the individual's learning process. The enterprising individual is constantly seeking new knowledge and information and this has been shown to impact on the individual's perception of feasibility, desirability and controllability of the intended firm formation behavior and in turn, his intention (Parker, 2006; Ozgen & Baron, 2007). Research also acknowledges that the importance and urgency of new knowledge and information becomes markedly apparent when the individual is at the nascent stage.

The nascent stage is marked by the individual not only making a choice to behave entrepreneurially (through starting a new venture) but also manifesting that choice by undertaking the relevant venture creation activities or actions (Shaver, Carter et al, 2001; Brannback et al, 2007). Past research has suggested that nascent activities leading to venture start-up include registering the business entity, doing a business plan and seeking funds, partners and resources (Liao et al, 2005). Having the skills and knowledge of what to do, where to go and who to approach at this stage is paramount for successful venture birth (Reitan, 1997; Parker & Belghitar, 2006)

Literature suggest that an important source of venture creation specific information and knowledge come from interactions with business counselors and trainers, industry experts, other entrepreneurs and business support representatives (Parker,2006; Patel & Fiet, 2009). In many instances, these interactions occur in an organized learning context such as short duration entrepreneurship seminars, conferences and business network discussion sessions. Empirical evidence suggest that nascent individuals are attracted to these forms of learning context because they are relative easy to access, much less demanding in terms of time and cost as well as affording an almost one-stop access to people and learning that may be otherwise difficult to find or to reach (Casson, 2003; Ozgen & Baron,2007). This has prompted many governments to feature the short duration learning interventions in their in policy directed business assistance and entrepreneurship acculturation programs (Lundstrom & Stevenson, 2001; Dennis & Reynolds, 2004).

Malaysia is an important case in point where short duration entrepreneurship seminars and training programs are featured in policy initiatives aimed at enhancing the entrepreneurial capacities of the small and medium enterprise sector (Economic Planning Unit, 2010; National SME Council, 2009). The SME Annual Report 2009 states that between the years 2007 to 2009, the government spent almost 10 billion (2% of GDP) on SME entrepreneurship enhancement programs that utilize the short duration seminar approach (National SME Council, 2009).

In spite of the strategic reliance on the short duration seminars in nascent entrepreneurship development efforts and venture creation aspirations of both the individual and host economy, very little empirical evidence exist regarding the relationship between short duration seminars, nascent learning experience and venture creation intentions.

Given this empirical gap, the research at hand aims to offer both theoretical and strategic insights on the impact of short duration entrepreneurship seminar learning experience on nascent intentions. This is primarily achieved by applying empirically Ajzen's (1991) Theory of Planned Behavior (TPB) to examine entrepreneurial intentions of nascent individuals as they participate in a government initiated 4-day entrepreneurship seminar meant to support venture creation aspirations. The Theory of Planned Behavior (TPB) derived research model stays close to its original structure with attitude, subjective norms and perceived behavior control as the antecedents of intention. The study model is presented as pre-seminar and post-seminar research model to afford testing of intention change over the course of the seminar. Entrepreneurial learning is constructed as a total learning experience that moderates the relationship between the intention antecedents and venture creation intentions. The study model is presented in Appendix 1.

## **2. Theoretical Background And Hypotheses**

### ***2.1 Entrepreneurial Intentions and Antecedents of Intention***

The basic premise of the social psychology Theory of Planned Behavior (Ajzen, 1991) is that planned behaviors are preceded by conscious intention to carry out that behavior. As such, planned behaviors (like starting a new business) can be predicted by intention towards that behavior. In turn, intentions are predicted by three key attitudes namely attitude towards the particular behavior intended, subjective norms and perceived behavioral control.

In line with the specific context of the study, entrepreneurial intention is defined as the judgment of the nascent individual on the likelihood of setting up an own business venture after attending the short duration entrepreneurship seminar. The definitions for the three antecedents of intention are as follows: Attitude towards the behavior (of creating a new venture) is defined as the individual perception of personal desirability of becoming an entrepreneur through the creation of one's own business. Subjective Norms refer to how the nascent individual perceives other people, who are important in his life, view his intention to start an own business. These perceptions form a social pressure that the individual feels motivated to comply. Perceived Behavioral Control is the individual's perception of ease or difficulty to create an own new business. The perception of how easy or difficult the intended behavior is in turn reflected in perceptions of firm creation capabilities and control over the outcomes.

Entrepreneurship research has established the applicability of the TPB structure in studying entrepreneurial behaviors pertaining particularly to new venture creation, self-employment and the basic propensity to behave entrepreneurially (Kolveried, 1996; Krueger & Carsrud, 1993; Krueger et al 2000). Entrepreneurship intention studies employing the TPB structure have indicated strong support for the efficacy of the theory

to explain anything from 21% to 45% of variance in intentions (Tkachev & Kolveried, 1999; Autio et al, 2001; Van Geldren et al, 2008).

In spite of this, the three antecedents of intention in the TPB model have shown varied significance in predicting intention in different study context. For this reason, researchers suggest testing the efficacy and significance of a TPB model in the particular context of a study to gauge any unique behavior patterns emerging (Armitage & Conner, 2001; Fayolle et al, 2005; Souitaris et al, 2007). Therefore to confirm efficacy and gauge specific core relationship patterns between the three antecedents and intention, the following hypotheses is suggested:

Hypothesis 1: Attitude has a positive relationship with entrepreneurial intention to create a new firm

Hypothesis 2: Subjective norms has a positive relationship with entrepreneurial intention to create a new firm

Hypothesis 3: Perceived behavioral control has a positive relationship with entrepreneurial intention to create a new firm

In all three hypotheses, entrepreneurial intentions refer to pre-seminar intentions or intentions before the seminar learning experience.

## **2.2 Entrepreneurial Learning**

Much of the literature on the impact of education and training on entrepreneurial intentions has positioned the learning element as impacting directly on the three intention antecedents which in turn determines intention (Peterman & Kennedy, 2003; Souitaris et al, 2007). This study argues that while this is justified in studies that involve university students and school children who experience extended exposure to learning, treating learning as an exogenous variable may not work in the context of nascent individuals exposed to very short durations of learning.

The basic argument is based on empirical evidence that behavioral attitudes, presented as intention antecedents in this study, are relatively stable constructs that have been shown to not change easily over short periods of time (Fishbein & Ajzen, 1975; Krueger, 2003; Ajzen, 2005). On the other hand, behavioral intentions are fragile and can change easily (Krueger & Brazeal, 1994; Ajzen, 2005). Given these arguments and the study context, the study hypothesizes that the learning experience construct is best positioned as impacting on the core relationships in the study model to affect change in intention (or not)

In addition, the learning experience construct or Entrepreneurship Seminar Learning Experience (ELE) is presented as a 'total learning experience' construct. According to the latent literature on entrepreneurial learning, exposure to information in an organized context (like a entrepreneurship seminar) can culminate into newly acquired knowledge and cues that represent a total stock of learning experience for the individual. The 'total learning experience' is fundamentally the accumulation of transcendent, revealed knowledge with an emotive element that serves to affect prior knowledge and

information that the individual brings into the current learning context (Politis, 2005; Rae, 2006).

Base on this, the study hypothesizes that the newly acquired learning experience from participation in a short duration entrepreneurship seminar can either confirm or disconfirm (disrupt) existing perceptions of entrepreneurship and venture creation. The adjusted perception in turn is expected to moderate the relationship between the intention antecedents and intention. The study defines Entrepreneurship Seminar Learning Experience (ELE) as the extent to which entrepreneurship seminars confirm prior knowledge, understanding and perception on issues regarding venture creation and venture management.

Base on this premise, the following hypotheses are proposed:

Hypothesis 4: Entrepreneurship seminar learning experience moderates the relationship between attitudes and entrepreneurial intention to create a new firm

Hypothesis 5: Entrepreneurship seminar learning experience moderates the relationship between subjective norms and entrepreneurial intention to create a new firm

Hypothesis 6: Entrepreneurship seminar learning experience moderates the relationship between perceived behavioral control and entrepreneurial intention to create a new firm

### **3. Methods And Procedures**

#### ***3.1 Participants and procedures***

The research employs a purposive sampling approach in keeping with the specific requirements of the study framework. A key requirement is the respondents need to be nascent individuals (actively undertaking firm creation activities) who are participating in a short duration entrepreneurship seminar at the time of data collection. The study defines 'short duration seminar' as one that spans between 1 to 7 days.

After much deliberation, the study chose to approach participants in a basic entrepreneurship skills development seminar series organized by the Ministry of Rural and Regional Development (KKLW). The KKLW seminars are 4-day residential programs held across Malaysia with each seminar attracting between 20 and 30 participants with diverse business interest and exposures looking to successfully start their own ventures. This particular seminar series, like many other public policy driven programs, is limited to the *Bumiputera* indigenous community participation only.

Given the specific objective of examining variation in intention (intention change) from before and after participation in a short duration entrepreneurship seminar, the pretest and posttest survey design was utilized to collect the necessary data. For the pre-test a close-formatted, self-administered questionnaire is distributed to the seminar participants just prior to the start of the seminar. The questionnaires are collected before the start of the seminar. For the post-test a structured questionnaire is administered over the telephone with each respondent within two weeks of the completion of the seminar.

A total of 240 respondents was surveyed from 10 seminars held across the country between April and August, 2009. Out of this number, 166 respondents qualified for the

final data set. Totally new, or novice nascent individuals, looking to start their first new business venture make up 75 (45%) respondents in the final data set. The other 91 (55%) respondents are non-novice nascent individuals that are either looking to create an additional new venture or a subsequent new venture after closing or selling off a previous venture. The literature refers to the latter as portfolio nascent individuals and the former as serial nascent individuals (Westhead & Wright, 1998)

The respondents are mainly female (70%) with the average age across the sample group being 40 years old. While 23% of the respondents have a tertiary level education achievement, the others have mainly secondary and vocational education backgrounds.

### **3.2 Measurement Instrument and Scales**

The pre-seminar questionnaire measures Attitude, Subjective Norms, Perceived Behavioral Control and Pre-seminar Intention (venture creation intention at the time of entering the seminar). A 6-point interval scale (1='very, very not true'; 6= "very, very true") was used to measure all the variables except for the Attitude variable that was measured using a specifically designed ratio scale. The post-test questionnaire measured Post-seminar Intention (venture creation intention after the seminar) as well as Entrepreneurship Seminar Learning Experience (ELE). Post-seminar Intention is measured with a similar 6-point scale used in the pre-seminar questionnaire while a different 7-point scale was used to measure ELE. All items are presented in both Bahasa Malaysia and English to cater for the respondent's language preference and elicit the most accurate response possible.

#### **3.2.1 Entrepreneurial Intention**

Pre-seminar entrepreneurial intention is measured using 11 items to reflect intent towards venture ownership at the start of the seminar. Questions such as "My mind is set to start a business" and "It is likely that I will personally own a small business in the relatively new future" are adapted from previous research.

Post-seminar Intention is measured with a single question "How likely is it for you to start a new business in the near future now that you have participated in the seminar"

#### **3.2.2 Intention Antecedents**

##### **(a) Attitude**

Attitude proved a challenging construct to accurately capture due primarily to its latent nature. Research literature indicates that Attitude has both an explicit and implicit facet that impact on intention differently (Ajzen, & Fishbein, 1980; Ajzen, 2005). Robinson (1991) suggests that attitude in entrepreneurship exist at both the general and specific levels and as such, require specificity in measurement. Given the issue of specificity, the study utilized a new ratio-scale that was composed and tested in a previous study by Zainab and Fauziah (2009). The Attitude scale comprises of 6 positive and 6 negative statements pertaining to attitude towards venture creation and ownership. Respondents are ask to pick any 6 statements and only the positive statements from the respondents choices are added up to give a single summated score for each respondent. Earlier testing

show that this new scale offers superior predictive capabilities over other selected measurement scales utilized in previous entrepreneurial intention research.

(b) Subjective Norms

This construct is measured using 8 items that gauge perceptions towards the opinion of ‘important others’ (people who are important to the individual) regarding the individual’s intended behavior as well as the individual’s motivation to comply with the opinions. Examples of questions used include “Owning a business gives me social status in my community” and “My family/relatives/friends would like to see me start a business”.

(c) Perceived Behavioral Control (PBC)

This construct is measured for both control and efficacy elements in the perceived behavior. Items measuring control are relatively strongly worded statements pertaining to wanting to perform the behavior and a sense of having the last say in actually carrying it out. An example is “I have the freedom to decide whether I want to be an entrepreneur”. In contrast, efficacy items reflect perception of how easy it is to carry out the behavior primarily due to the possession of certain skills or capabilities. The study posted a total of 20 items for the construct.

### 3.2.3 Entrepreneurship Seminar Learning Experience (ELE)

This construct is unique to the study and is fashioned after what the entrepreneurial learning literature refers to as a ‘total learning experience’ that combines the revealed knowledge and emotive experience to produce an overall, adjusted perception of the target behavior (and therefore the intention) upon leaving the seminar.

Guided by the literature and keeping the specificities of the study in mind, the construct is measured through 5 items. The first 3 items essentially represents perceptions of learning experience with regards to knowing better what to do, the skills needed and what new venture creation behavior entails. The other 2 items gauge perceptions of knowledge gain regarding access to business support (e.g. counselors and business networks) and resources (e.g. government grants and bank loans).

The ELE construct was measured using a 7-point interval scale (1=strongly disagree; 7=strongly agree) to indicate the extent of agreement (positive affirmation of new knowledge) or disagreement (negative affirmation of new knowledge). The scale has a mid-point (4=neutral or no change) indicating a perception of no change in knowledge (prior knowledge reaffirmation). Simply put, the scale suggests that the nascent individual may perceive the learning experience as strengthening, not having any tangible effect or even depressing new venture creation perceptions.

### 3.2.4 Control Variables

The study identified two viable control variables namely nascent status (novice and non-novice nascent) and education status (tertiary and non-tertiary education). The choice was guided by previous research that have establish that demographic variables like gender, family background and experience do not significantly contribute to explaining variance in entrepreneurial intention (Tkachev & Kolveried, 1999; Souitaris et al., 2007). On the

other hand, literature indicates that the experience of a novice nascent individual creating a business venture for the first time will be different from that of the non-novice nascent individual (Carter, Gartner et al., 1995; Baron, 1998) on issues pertaining to learning and resource capabilities. Also the literature abounds with evidence of role of education in entrepreneurial learning and decision making (Ramayah & Zainon, 2005; Nabi et al., 2006)

To confirm reliability of the measurement scales, Cronbach's alpha is obtained for relevant variables. The measurement items are also subjected to Factor Analysis using principal component extraction and varimax rotation (Table 1). Attitude's single summated score and Post-seminar Intention single item measure are not suitable for factor extraction and therefore not reported.

**Table 1: Factor Extraction Outcome & Cronbach's Alpha**

Variable	Before Factor Extraction		After Factor Extraction	
	No.of Items	Cronbach's Alpha	No.of Items	Cronbach's Alpha
Pre-seminar Intention	11	0.907	7	0.882
Subjective Norms	8	0.893	7	08.69
Perceived Behavioral Control	20	0.940	10	0.879
Entrp. Seminar Learning Experience	5	0.863	5	0.863

#### 4. Results

The frequency analysis of the study variables show that the bulk of the scores are situated at the higher end of the scale (scores 4-6). Together with relatively high mean score and small standard deviations, the frequencies imply that:

- (a) Intention to create a new own firm both before and after the seminar are generally high;
- (b) Learning experience is very positive for the majority of respondents
- (c) Respondents record moderately high scores for Attitude, Subjective Norms and PBC implying generally positive levels of the antecedents of intention

The dependent (paired sample) t-test between pre-seminar intention (M=4.94, SE=0.05) and post-seminar intention (M=5.30, SE=0.05,  $t(165) = -5.65$ ,  $p=0.00$ ) indicates there is a significant heightening of entrepreneurial intention after the seminar.

Also, t-test show a slight but significant difference in pre-seminar intention between respondents with tertiary and non-tertiary level education attainments. Respondents that have a tertiary education exposure have a slight edge over those respondents that do not. There is also a similarly small but significant difference in learning experience between novice and non-novice respondents. Novice nascent individuals perceive a greater

learning experience over the more experienced non-novice nascent individuals. This result also re-affirms the use of nascent status and education attainment as control variables in the hierarchical regression later.

To test for the first three hypotheses, the study look primarily to correlation analysis and linear regression analysis Correlation analysis is used to indicate strength and direction of association between the variables in the study model. Correlation results (Table 2) show that all three independent variables of Attitude, Subjective Norms and PBC have significant and positive associations with Pre-seminar Intention ( $r=0.17, 0.72, 0.78, p<0.05$ ). However, only PBC has a similar significant association with Post-seminar Intention ( $r=0.23, p<0.05$ ).

**Table 2: Correlation Matrix for Intention & Predictors of Intention**

Variable	1	2	3	4	5	6
1. Pre-seminar Intentions	1					
2. Post-seminar Intentions	0.22**	1				
3. Entrp. Seminar Learning Experience	0.02	-0.03	1			
4. Attitude	0.17*	0.12	-0.10	1		
5. Subjective Norms	0.72**	0.15	-0.08	0.16*	1	
6. Perceived Behavioral Control	0.78**	0.23**	-0.06	0.18*	0.70**	1

\*  $p<0.05$  \*\* $p<0.01$

To test for causality, linear regression analysis is carried out on the study variables. Of the three antecedents of intention, Perceived Behavioral Control is the only variable to have a significant relationship with both Pre and Post-seminar Intentions. The strength of the relationships though is markedly different. While PBC shows a strong capability to explain variance in Pre-seminar Intentions (Adj. $R^2=0.61$ ), its ability to explain variance in Post-seminar Intentions is decidedly lower (Adj.  $R^2=0.05$ )

Both Subjective Norms and Attitude show significant abilities to predict variance in only Pre-seminar Intentions albeit very different predictive strengths. Subjective Norms records a significantly higher predictive capability (Adj. $R^2=0.5$ ) to Attitude (Adj.  $R^2=0.02$ ). Unlike PBC, both Subjective Norms and Attitude show no significant relationships with Post-seminar Intentions.

Based on the convention set in Souitaris et al (2007), hypotheses involving research variables and models over two time periods (pre and post) are fully or partially accepted depending on whether the variable is shown to have significance at only one time (partially accepted) or at both times (fully accepted). Being insignificant at both time periods mean the hypothesis should be rejected.

Base on this convention and the results outlined above, Hypothesis 1 (Attitude) and Hypothesis 2 (Subjective Norms) are partially accepted because both variables show significant correlations and linear relationships with Pre-seminar Intention but not Post-seminar Intention. Hypothesis 3 (Perceived Behavioral Control) on the other hand is fully accepted because of significant associations and linear relationships with both Pre and Post-seminar Intentions.

In both the correlation analysis and the simple regression the study moderating variable, Entrepreneurship Seminar Learning Experience (ELE), show no significant association with any of the study independent variables or any significant capability to explain variance in the dependent variable, Post Seminar Intention.

To test further the link between the predictor (independent) variables and intention, the study models are subjected to multiple regression analysis. The multiple regression results (Table 3) show that, as a group, the predictor variables are significant determinants of both Pre and Post-seminar Intentions. In spite of this, R-statistics for the two time periods indicate very different quantum of effect (Pre-seminar Adj. R<sup>2</sup>= 0.663 compared with Post-seminar Adj. R<sup>2</sup>=0.044). PBC emerges as the strongest individual predictor across both time periods while Attitude is not significant in either time. Subjective Norms proves to the most erratic variable by going from being a positively significant predictor in one instance to having an insignificant and negative effect in the other.

**Table 3: Regression of Predictor Variables on Pre & Post-seminar Intentions**

Predictor Variables	Pre-seminar Intentions	Post-seminar Intentions
	Std. $\beta$ Coefficient	
Attitude	0.022	0.083
Subjective Norms	0.345*	-0.036
Perceived Behavioral Control	0.533*	0.243*
<b>Adjusted R<sup>2</sup></b>	<b>0.663*</b>	<b>0.044*</b>

\*p<0.05

To test for the moderating effect of Entrepreneurship Seminar Learning Experience (ELE) on the relationship between each of the predictor variables and Post-seminar Intentions, hierarchical regression is utilized. The study chose to apply a 4-step hierarchical regression guided by conventions set in previous studies by Saridan (2007) and Turker and Selcuk (2008). Each step in the regression is mark by the introduction of a set of variables as follows: Step 1 - control variables of nascent status and education; Step 2 - predictor variables of Attitude, Subjective Norms and PBC; Step 3 - moderator variable Entrepreneurship Seminar Learning Experience; Step 4 - interaction terms ELE with Attitude (ELE\_attitude), ELE with Subjective Norms (ELE\_norms) and ELE with

Perceived Behavioral Control (ELE\_PBC). The result of the hierarchical regression is shown in Table 4

Based on research methodology convention found in the latent literature, the moderator variable can be said to interact with a particular predictor to affect change (in intention) when the interaction term is significant as indicated by the F statistics. In such a case, then the related hypothesis can be accepted (Hair et al, 1998; Tabachnick & Fidell, 2001; Field, 2005).

**Table 4: Summary of Hierarchical Regression Results**

	<i>Standardized Beta</i>			
	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
<b><i>Step 1: Control Variables</i></b>				
Education Level	-0.20	0.03	0.01	-0.02
Nascent Status	0.10	-0.05	-0.05	-0.05
<b><i>Step 2: Predictor Variables</i></b>				
Attitude		0.08	0.08	0.91
Subjective Norms		-0.04	-0.04	-1.55
PBC		0.26*	0.26*	1.07
<b><i>Step 3: Moderator Variable</i></b>				
ELE			0.01	-0.07
<b><i>Step 4: Interaction Terms</i></b>				
ELE x Attitude				-0.87
ELE x SN				1.79
ELE x PBC				-1.00
<b>Overall R<sup>2</sup></b>	0.01	0.06	0.06	0.09
<b>R<sup>2</sup> Change</b>	0.01	0.06	0.00	0.02
<b>F Change</b>	0.04	3.59*	0.02	1.19

\*p<0.015

The results of the first step indicate that neither of the control variables emerges as significant factors. In the second step, the combined effect of the predictor variables contribute significantly to explaining variance in intentions as indicated by R<sup>2</sup> change=0.063 and significant F change statistic. Although the predictor variables are entered as a group, PBC ( $\beta=0.26$ ) again emerges as the single most strong and the only individually significant variable of the three. The third step has the moderator variable ELE being entered with almost no impact on the model relationships (R<sup>2</sup> change= 0.00; F change not significant). In the last step, all three interaction terms are entered to gauge the impact of the moderator ELE on the model core relationships. Although the interaction terms contribute slightly in explaining variance in the model as seen in R<sup>2</sup> change=0.021, all three interaction terms emerge as statistically insignificant.

To confirm the above results, the study follows conventions set in Turker and Selcuk (2008) and ran separate hierarchical regression for each set of predictor variable and the interaction term for that variable with ELE. The control variables are retained as is. Results for the individual exercise show marginal changes in absolute beta values but no

changes in significant levels were recorded. The individual regression confirms that the interaction effect of ELE with each predictor variable is not statistically significant.

Based on this outcome, the study rejects Hypothesis 4, 5 and 6 signifying that the study is unable to show that entrepreneurship seminar learning experience has any significant impact on the relationships between the predictor variables and intention to create a new venture.

## **4. Discussion of Findings and Conclusions**

### ***4.1 Theoretical Implications***

The study works on the anticipation that entrepreneurial intention can experience change even in short spans of time. The results of the t-test confirms this and indicate that the change is in fact positive with intensity of intention being significantly higher after just 4 days of seminar learning exposure. This finding is an important input considering the relatively sparse empirical evidence on nascent intention change with particular reference to change over brief time periods.

In terms of the efficacy of Theory of Planned Behavior in predicting entrepreneurial intentions, the multivariate significance of the study models confirms the explanatory capability of the TPB derived predictors on intention to create new ventures. While the general results support the TPB efficacy, the behaviors of individual predictor variables offer interesting, context specific insights. Perceived Behavioral Control's consistently strong position concurs with the latent literature (Armitage & Conner, 2001; Autio et al., 2001). The current study attributes this consistent significance mainly to how nascent individuals, when faced with the complexity and vulnerability of a new venture creation decision, may lean more towards efficacy and controllability factors (reflected in PBC) as compared to issues of desirability (as reflected in Attitude) or social capital (as reflected in Subjective Norms).

Subjective Norms' erratic behavior is not totally unexpected since previous studies do show that the variable is the weak link in the general TPB structure (Armitage & Conner, 2001) as well having a poor record in explaining variance in entrepreneurial intention (Fayolle et al., 2005; Linan & Chen, 2006). Some past research findings also suggest that the social pressures that make up the Subjective Norm construct may exert an indirect effect that can modify an individual's sense of efficacy or capability to carry out an intended behavior satisfactorily (Kreuger & Carsrud, 1993; Davidsson, 2006). With an element of efficacy embedded in the PBC construct, it is possible that Subjective Norm may be manifesting its influence through the PBC efficacy component.

On the other hand, the reason behind the overall weak position of Attitude is more difficult to pinpoint. Having addressed the issue of specificity through the specially design and tested Attitude measurement scale, the study result suggests that specificity alone may not be enough to address the construct's latent nature. While not discounting the fact that the integrity of the new scale needs to be reaffirmed, the study's experience

with the attitude construct is added proof of the challenge to contain and effectively measure this latent element in predicting entrepreneurial intentions.

A key outcome of the study is that the insignificance of the 'learning experience' construct or ELE in the model. In spite of the fact that the respondents indicate a positive learning experience (ELE mean score was 5.06), the new knowledge and information gain do not translate to making the experience a significant factor impacting on the model's core-relationships. While this result parallels findings in previous studies by Fayolle et al (2005) and Souitaris et al (2007), the study's findings do call for a review of whether the learning construct will fare better or differently if it is treated as separate constructs of revealed knowledge learning and emotive (inspirational) learning. Past research, like that by Souitaris et al (2007), do suggest that emotive learning component of the total learning experience may have a bigger significance in certain context as compared with revealed knowledge component.

Also, the study notes that the study's specific context of a policy initiated learning intervention environment may have contributed to the significance of the learning outcome. The results give rise to suspicions that gaining new knowledge may have been perceived as incidental or secondary motive to other motives for participating in the seminar. For instance, an alternative motive to participate may be the perception of the policy initiated short seminars as gateways to access government aid (e.g. government grants or low interest loans; goodwill towards procuring business contracts). Such alternative, and possibly stronger, motive to access the perceived link to such aids over a learning motive may affect the significance of the learning construct outcome.

#### ***4.2 Strategic Implications***

A key strategic implication of the study's results must be the confirmation of the existence of active entrepreneurial intentions at play within the context of the short duration seminars. The study outcome indicate that intention is not only active but also experiences change within this brief learning exposure implying that seminar organizers and facilitators will somehow encounter these intentions whether they are conscious of it or not and regardless of whether the seminar objectives and design cater for this cognitive element.

While in all fairness, it must be noted that detecting and gauging movements in entrepreneurial intention can be challenging. In spite of the challenges the study results suggests that overlooking or simply setting aside how the short duration seminar context does impact on intention change may not be wise or even an option. To do so may amount to leaving how intention changes in this particular context very much to chance—that is, the change may be positively heighten (as in the case of this study) or conversely, intention change can be negatively depressed. Such an unwitting gamble does not augur well for the overall policy success.

The study results though do show that the short duration seminar approach is well placed to equip the nascent individual with new knowledge and information that can affect

entrepreneurial awareness and confidence. More specifically, the study evidence indicates that the seminar learning experience can positively develop the nascent individual's sense of self-efficacy and controllability over firm creation intention. To that extend, the short seminar format can be an important platform for human capital development of nascent individuals not leading directly to firm birth. Policy makers and their collaborators need to understand both the implication of this strength and its limitations.

The short seminar approach should be used to create a momentum that can be taken up by other policy programs to advance the nascent firm creation aspiration to a successful conclusion. This means that the short seminar effort on its own, cannot, and should not be expected to culminate into successful firm births. Instead, nascent entrepreneur development must be a support mechanism of several component efforts with distinct primary deliverables that can dovetail into an effective force. The study suggests that short duration entrepreneurship seminar should remain a key component but, as the study also indicates, they are other more significant factors at play in this context, other than the learning factor, that are impacting on intention change. This other factor(s) need to be identified and addressed if the total policy effort is to be fruitful.

## **5. Study Limitations and Suggestions for Future Research**

The study addresses entrepreneurial intentions but not the actual behavior outcome due to an expected time lag problem (of between 12-24 months from intention to behavior outcome). A longitudinal approach to follow intention through to behavior will offer much insight into the entrepreneurial venture creation process.

In terms of the study model, the results suggest that future research may consider the following suggestions: First, attempt to understand the separate contribution of the self-efficacy and controllability components in PBC in predicting intention possibly through deconstructing the variable into its components. Second, explore the possibility of Subjective Norms manifesting itself through the self-efficacy component in the model or as a standalone self-efficacy construct instead. Third, investigate further the volatile behaviors of the predictor variables from before and after the short duration seminar by measuring the predictors at both time points to gauge any salient changes. Although the study is built on literature evidence that predictors of intention, unlike intention itself, is not likely to change in a short duration of time, given the study outcome it may be interesting, or even prudent, for future studies to reaffirm or even challenge existing evidence. Lastly, the emotive component of the learning construct ELE should be explored further to see if this component has better significance in nascent individual learning experience as compared to revealed knowledge.

In relation to measurement scales, the ratio scale with a single summation score designed and used to measure Attitude in this study does not currently lend itself to reliability and validity testing. In the interest of developing a measurement scale that can effectively capture the essence of the attitude construct in entrepreneurial intention, the Attitude scale used here should be re-tested and modified.

Last but not least, future efforts should pursue other factors that can significantly impact on intention change in a similar context. The suspicion that other motives for participating in the seminar may impact on learning being significant suggests that future efforts should consider alternative motives as a factor in any future study framework.

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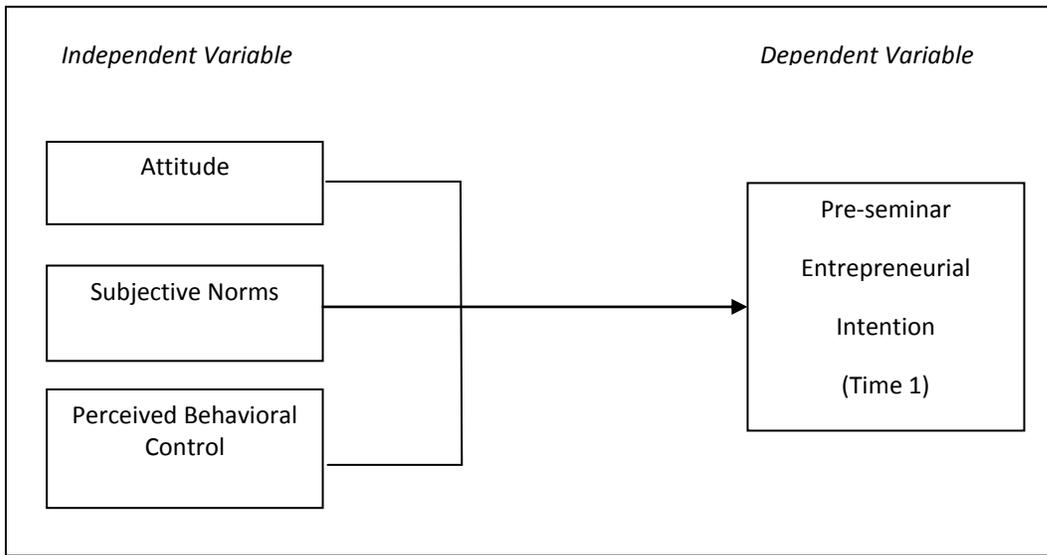
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**APPENDIX 1**

**Figure 1a: Study Pre-seminar Model (Model Time 1)**



**Figure 1b: Study Post-seminar Model (Model Time 2)**

