

**INFLUENCE OF ENTREPRENEURSHIP EDUCATION ON  
ENTREPRENEURIAL SELF-EFFICACY(ESE)  
OF THE PARTICIPANTS**

A

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**CHAPTER 7**  
**SUMMARY, DISCUSSION,**  
**CONCLUSION**  
**AND**  
**RECOMMENDATION**

## **7. Summary, Discussion, Conclusion and Recommendation**

### **7.1 Summary and Discussion**

Lack of interest among youth towards traditional employment and government focus towards developing entrepreneurial instincts through various policies related to start-ups and digitalization of the economy has contributed significantly to the promotion of entrepreneurial culture in India. Due to this a formal education in entrepreneurship has also gained a lot of momentum lately. Most of the higher education institutions today are offering compulsory as well as elective courses in the field of entrepreneurship. Most crucial among these institutes are those which offer full-time post-graduation in the field of entrepreneurship. Several renowned academic institutions are offering one-year and two-year full-time post-graduate diploma/degree courses in entrepreneurship, family business, venture creation, and innovation with EDII as the torchbearer and pioneer among them. In 2019, AICTE introduced two years' full-time masters' program in Innovation, Entrepreneurship and Venture Development (IEV) and fifteen colleges across Indian have been approved for the same (AICTE, 2020).

In reference to the growing significance of entrepreneurship education in India, it has become pertinent to measure the influence of entrepreneurship education on the entrepreneurial behaviour of the participants. Also, it is fascinating to observe distinction in the outcome of entrepreneurship education in comparison to the regular management education where entrepreneurship is taught as one of the core or an elective course.

The review of literature in the field of entrepreneurship, suggests that over the years, studies measuring entrepreneurial behaviour have evolved from personality traits and demographic variable-based models to intention based models. Currently, entrepreneurial intention is considered to be the closest predictor of entrepreneurial behaviour and the influence of any intervention aimed at enhancing entrepreneurial behaviour is measured by examining its influence on entrepreneurial intention. Entrepreneurial intention, in turn is determined based on various precursors like perceived desirability, propensity to act, social norms, self-efficacy, social-political-economic context etc. derived through various intention models.

Among the antecedents of entrepreneurial intention, entrepreneurial self-efficacy has consistently emerged as the most significant predictor of entrepreneurial intention and actions based on the previous studies measuring entrepreneurial intention. (~~Boyd & Vozikis, 1994; Krueger & Brazeal, 1994; Davidsson, 1995; Kolvereid, 1996; Chen et al., 1998; Krueger et al., 2000; Segal et al., 2002; Fayolle & Gailly, 2005; Kickul & D'Intino, 2005; Sequeira et al.,~~

~~2007; McStay, 2008; Hamidi et al., 2008; Mc Gee et al., 2009; Sanchez, 2011, Sánchez, 2013; Liñán et al., 2011; Farashah, 2013; Malebana & Swanepoel, 2014; Shinnar et al., 2014).~~

As the domain of entrepreneurship education and its influence on entrepreneurial behaviour is highly under researched in the Indian context, the present study explores the influence of entrepreneurship education on ESE by examining significant differences in ESE of three sets of respondents,

- i) Entrepreneurship education (EMBA) graduates and prospects,
- ii) EMBA and regular management education (RMBA) prospects *and*
- iii) EMBA and RMBA graduates

Data analysis is done using statistical tests like independent sample t-test and MANOVA. The differences in overall average ESE, venture creation phase-specific ESE as well each task-specific ESE are examined to identify the domains and tasks where the significant differences exist in the ESE of each of the paired group respondents mentioned above. The multiple comparison among different groups provides comprehensive understanding and ability to comment on the role of entrepreneurship education in enhancing ESE of the respondents.

To further enhance the understanding regarding the influence of entrepreneurship education on ESE of entrepreneurs, a qualitative study is also conducted through in-depth interview of entrepreneurs. Around thirty entrepreneurs who have undertaken entrepreneurship education earlier are interviewed to understand their views on the effectiveness of entrepreneurship education. Their views are also significant pertaining to further improvements required to enhance the efficacy of such educational interventions.

Based on the understanding derived from the results of data analysis, it can be **concluded that entrepreneurship education significantly increases the ESE of the respondents** and this finding is in consensus with various other previous studies undertaken across different countries. However, most of the previous studies focus only on over-all ESE and short-term entrepreneurship education programs. Further exploration into venture creation phase-specific and tasks-specific analysis of influence of entrepreneurship education on ESE using MANOVA depicts that though the overall influence of entrepreneurship education on ESE is significantly positive, **ESE on all the tasks involved in entrepreneurial venture creation is not enhanced uniformly. Entrepreneurship graduates differ significantly from management graduates in ESE of marshalling phase and implementing (finance) phase and general ESE but no significant differences are observed in searching phase, planning phase, implementing (people) phase and implementing (IT) phase of venture creation**

process. However, the influence of **entrepreneurship education is found to be significant in planning and implementing (IT) phase** as well in addition to **marshalling and implementing (finance) phase of venture creation and general ESE** but ESE of EMBA graduates and RMBA graduates is not significantly different for planning phase and implementing (IT). This may be attributed to analogous influence of RMBA on these phases of venture creation. Infact, on the planning phase, influence of RMBA is much higher than EMBA. **The least influence of entrepreneurship education** is observed in **searching phase** followed by **implementing (people)** phase of venture creation process.

Task-specific analysis reveals entrepreneurship education significantly influences **maximum number of the tasks in marshalling phase and none of the tasks in searching phase** of venture creation. Among all the phases of venture creation, **most significant difference in ESE between entrepreneurship graduates and management graduates** is observed in **implementing (finance)** as entrepreneurship graduates have significantly higher ESE than management graduates on **all the tasks** involved in this phase although EMBA significantly influences only one task in this phase.

The study on entrepreneurial behaviour is incomplete without taking into consideration demographic variables. In fact, in many of the earlier studies on entrepreneurial behaviour; demographic variables like gender and family background have been found to be the most important predictor of one's decision to pursue entrepreneurial career. Shinnar et al. (2014) recommends the inclusion of demographic factors as moderating variables in studies pertaining to influence of entrepreneurship education as it can be helpful in understanding and explaining the results of such studies. The present study, therefore takes into consideration four demographic variables i.e. gender, family background, prior work experience and prior entrepreneurial experience and examines the influence of these variables in moderating the impact of entrepreneurship education on ESE of respondents using two-way mixed method ANOVA including profile plots as well as post-hoc ANOVA analysis wherever required.

The results of the current study reveal **near to significant difference between the ESE of males and females**. But, the **moderating role** of gender in impacting the influence of entrepreneurship education is **not statistically significant**.

With respect to family background, **significant difference** in ESE among respondents is observed only on the basis of **involvement of siblings** in business and **interaction with close friends and close relatives** about business. Involvement and interaction about business with parents and other family members, positively influences ESE but the influence is not

significant enough. However, **involvement in business** with family members and **extent of involvement** is found to **significantly influence ESE** of the respondents. But, **moderating role** of involvement of any of family members in business, interaction with family members about business as well as involvement of respondents in business of family members; **does not significantly** moderate the influence of entrepreneurship education on ESE.

The results of the current study with respect to the influence of previous work-experience on ESE suggests **significant** influence of **prior work-experience** in influencing the ESE. Entrepreneurship education influences ESE of individuals without prior work-experience more than the ESE of respondents with prior work-experience but the role of work experience in **moderating** the influence of entrepreneurship education on ESE is **not significant**. The influence of varying **duration of work experience** is also **not** found to be **significant**. This finding might have been influenced by small number (18%) of respondents with work-experience of more than two years.

The last demographic variable i.e., **prior entrepreneurial experience** is found to **significantly** influence ESE. Our findings suggest that individuals with prior exposure of starting their own venture have higher ESE but the influence of entrepreneurship education is not significantly different on individuals with and without prior entrepreneurial experience. Nevertheless, the influence of entrepreneurship education is more on individuals without prior entrepreneurial experience but not significantly higher than those with entrepreneurial experience. **Varying duration of entrepreneurial experience**, on the other hand, is **not** found to significantly influence ESE or moderate the influence of entrepreneurship education on ESE. Further examination of the findings of role of duration of entrepreneurial experience is not analysed as very few respondents in our study had entrepreneurial experience of more than one year.

It can be summarized that entrepreneurship education positively influences the over-all ESE but influence on all the tasks involved in venture creation is not significant, thereby suggesting the scope of further improvisation in current entrepreneurship education. The specific areas where further interventions are required in entrepreneurship education are discussed in the following section. Demographic variables like gender, involvement of family members in business, involvement of individuals in family business, prior work-experience and prior entrepreneurial experience influence the ESE but they do not moderate the influence of entrepreneurship education on ESE significantly.

## **7.2 Conclusion**

The conclusion of the study is divided into two parts:

- i) Conclusion with respect to findings related to Objective 1 aiming at understanding the influence of entrepreneurship education on ESE and
- ii) Conclusion with respect to findings related to objective 2 i.e. understanding the role of demographic variables in moderating the influence of entrepreneurship education on ESE.

The detailed conclusion related to influence of entrepreneurship education on each phase and each task involved in venture creation is presented below. Section 7.2.1 represents the phase-specific conclusion and Section 7.2.2 represents the conclusion related to influence of entrepreneurship education on ESE of each task. Section 7.2.3 elaborates on the conclusion related to influence of demographic variables on ESE and in moderating influence of entrepreneurship education. The conclusion is based upon the findings of quantitative data analysis as well as the outcomes of the qualitative data collected through interviews of entrepreneurs who had undergone entrepreneurship education.

### **7.2.1 Conclusion with respect to influence of entrepreneurship education on each phase involved in venture creation**

For the purpose of more detailed and meaningful conclusion, in addition to the phases of venture creation identified through exploratory factor analysis i.e. searching, planning, marshalling, implementing (people, finance and IT) and general ESE; general ESE is further bifurcated into ESE related to IPR, growth and exit strategy, perseverance, risk and uncertainty management, group and inter-personal skills, problem solving and product/service designing skills.

#### **i) Influence of EMBA in Searching Phase**

EMBA does not significantly influence ESE of any task related to innovative idea generation and its feasibility, however on most of the tasks of searching phase EMBA prospects have higher ESE.

The qualitative study also reveals that respondents felt EMBA is not very helpful in generating ideas and those who join the entrepreneurship education program with an existing idea are able to benefit more from the course. In fact, some of them suggested that a pre-existing business idea should be one of the pre-requisite for entry to entrepreneurship education programs. Respondents felt that if all the participants have pre-existing idea, peer to peer learning will be greater and course would be more beneficial. On the other hand, some students

who did not have initial business idea felt that first year of the course should be more dedicated towards idea generation and feasibility analysis.

Qualitative study as well as quantitative study reveals that the inputs and assistance provided for feasibility study and market research are insufficient and new product/ service introduction requires much deeper insight into customer problems and suggestions towards the idea. EMBA alumni also expected greater assistance from the institute towards the development of proof-of-concept and prototype through internal resources or external collaboration.

### **ii) Influence of EMBA in Planning Phase**

EMBA also lacks in providing most of the inputs required for the planning phase of venture creation. EMBA graduates are more equipped than RMBA graduates only on selection of appropriate form of business, that too because EMBA prospects have higher ESE on this task. Though EMBA helps in identifying the market segment but does not provide sufficient inputs for estimating the market size, determining appropriate price and selecting appropriate marketing strategy for introducing the product/service.

Qualitative study also reveals that respondents find the inputs in the domain of marketing to be very generic and more appropriate to already existing business instead of being focussed on starting a new venture. Respondents felt that marketing strategies were taught and discussed with the help of case studies of big brands and successful business which are not very pertinent to them when they start their own ventures. Respondents suggested simulation exercises could be more helpful than case studies of established businesses in teaching the concepts of marketing required by an entrepreneur.

### **iii) Influence of EMBA in Marshalling Phase**

EMBA provides required inputs to the participants in marshalling resources particularly marshalling financial resources for the business. It significantly influences ESE of respondents with respect to estimation of fund requirement, identifying potential sources of funding as well as appraising the valuation of the start-up and convincing banks to lend money. RMBA, on the contrary does not provide inputs on any of these tasks. Moreover, with respect to these tasks of marshalling financial resources EMBA prospects are no better equipped than RMBA prospects. EMBA also enhances ESE related to liasioning which is extremely important for gaining several permissions for starting a business specifically in the Indian context. However, EMBA does not significantly alter the ESE related to writing business plan and networking. Qualitative study reveals that respondents approved that the contribution of entrepreneurship education in helping them to estimate the requirement of the funds for starting a business as



well as in introducing them to new sources of funding like grants through government funds, bootstrapping, angel investors and venture capitalists.

However, respondents felt that demo pitching sessions would have made them more confident of pitching their ideas in front of angels and other investors later on. With regard to networking opportunities provided during the course, most of the respondents expressed during the interview that though they got good opportunity to network with their peers and developed good contacts, institutes have the potential to further connect their students with people in the domain of the business selected by them either through their alumni base or other industry and corporate contacts. If students can establish such contacts through institute it would benefit them greatly even in the long run.

**iv) Influence of EMBA in Implementing Phase (people related)**

EMBA scantily contributes in enhancing the ESE related to the tasks related to human resource management for establishing a business. EMBA does not significantly influence ESE related to recruiting the right people, training, supervising, inspiring and motivating them to perform their duties though it does influence ESE related to delegating the tasks to employees. However, EMBA prospects have higher ESE than RMBA prospects on supervising, inspiring and motivating employees.

Qualitative study reveals that EMBA alumni felt that human resource skills needed by entrepreneurs are unique and very different from managers. Alumni recommended that the focus of entrepreneurship education in the domain of human resource should not be on regular theories, practices, principles and case studies related to recruitment, motivation, appraisal etc., rather on team building and finding the co-founder as all other employee related tasks follow after few years of venture creation. In the initial phase, inputs with respect to forming an appropriate initial team with complementary skills should be the focus of EMBA. Few respondents also felt that EMBA is the best time for finding the co-founder as there are large number of like-minded people sailing in the same boat during that phase.

**v) Influence of EMBA in Implementing Phase (finance related)**

EMBA significantly influences ESE related to only developing effective financial control systems among all the tasks related to managing financials of the business. However, EMBA graduates have higher ESE than RMBA graduates on all the tasks related to financial management including maintaining financial records, managing financial assets of the business, interpreting financial statements, managing balance between assets and liabilities as

well as designing effective control systems. EMBA prospects also have higher ESE on maintaining financial records and managing financial assets when compared with RMBA prospects. Interviews with EMBA alumni reveals that sufficient inputs are provided with respect to keeping book of records and interpreting financial statements.

**vi) Influence of EMBA in Implementing Phase (IT related)**

EMBA positively influences ESE related to formulating digital marketing strategy as well as identifying and implementing appropriate software required for effective business operation. However, influence of EMBA on starting or scaling a venture using e-commerce is not found to be significant.

Qualitative study also reveals that though the course provides IT related inputs but in the current times, where technology has a pivotal role, more extensive inputs should be provided with respect to use of technology in business.

**vii) Influence of EMBA on General ESE**

**a) Influence of EMBA on using IPR**

EMBA significantly increases ESE related to use of intellectual property rights like trademarks and patents in starting a new venture. Qualitative study also reveals that EMBA acquaints respondents with the importance and application of intellectual property rights in a new venture. Though most of EMBA alumni felt they lacked the practical knowledge required in applying for IPR, but awareness about significance and need of IPR encouraged them to apply for required IPR through external assistance.

**b) Influence of EMBA on developing growth and exit strategy**

EMBA neither contributes significantly in developing growth strategy nor in developing exit strategy. ESE of EMBA prospects as well as graduates on growth strategy is higher than ESE of RMBA prospects and graduates respectively but EMBA does not significantly contributes in enhancing the ESE. With regard to exit strategy, neither EMBA prospects have higher ESE than RMBA prospects, nor does EMBA provide significant inputs regarding exit strategy. These results from quantitative analysis are in consensus to inputs received through interviews. Most of the EMBA alumni in their interview also mentioned that course should equip them with better understanding on scaling the venture as well as the right time/situation to exit from the business.

**c) Influence of EMBA on perseverance**

EMBA significantly enhances the perseverance related ESE of the participants. EMBA graduates have higher ESE with respect to perseverance as well as surviving during economic slowdown. Interviews with EMBA alumni reveal that interacting with various failed as well as successful entrepreneurs during the course made them more perseverant. Also, interaction with their peers who are in similar stage of venture during as well as after the course even motivates them to keep going in spite of hardships. Such interactions encourage them as they realize that most of their entrepreneurial friends are also facing similar challenges and difficulties in their entrepreneurial journey. Few of the interviewees mentioned that they were even able to find solution to their venture related problems through discussion with peers.

**d) Influence of EMBA on risk and uncertainty management**

EMBA significantly influences ESE related to taking decisions involving risks as well as coping the risk associated with pursuing entrepreneurial career. However, EMBA does not significantly influence ESE of dealing with unexpected changes in the business environment. Interviews with EMBA alumni also reveal that the course enhances their risk-taking capability and helps them in evaluating the nature and extent of risk involved in taking certain decisions.

**e) Influence of EMBA on group and inter personal skills**

EMBA significantly influences ESE related to working on collaborative projects, leading a group and resolving group conflict. Most of EMBA alumni responded very positively to the role of EMBA in improving their skills related to working collectively in the groups and attributed it to different group projects and exercises taken during the course of EMBA.

**f) Influence of EMBA on problem solving and product/service designing**

EMBA significantly influences the mind-set of the participants towards understanding and solving customer problems and designing a product/service related to it. Qualitative data also reveals that EMBA positively contributes in developing their problem-solving skills. However, respondents expected better inputs from the course with respect to converting the problem solution into feasible and successful business ideas.

**7.2.2 Conclusion with respect to influence of entrepreneurship education on each task involved in venture creation**

The detailed task specific conclusion with respect to tasks where EMBA graduates have higher ESE than RMBA graduates; EMBA graduates have lower ESE than RMBA graduates and the tasks where EMBA and RMBA graduates differ in ESE but the difference is not statistically significant; is presented in *Figure 7-1, Figure 7-2 and Figure 7-3* respectively.

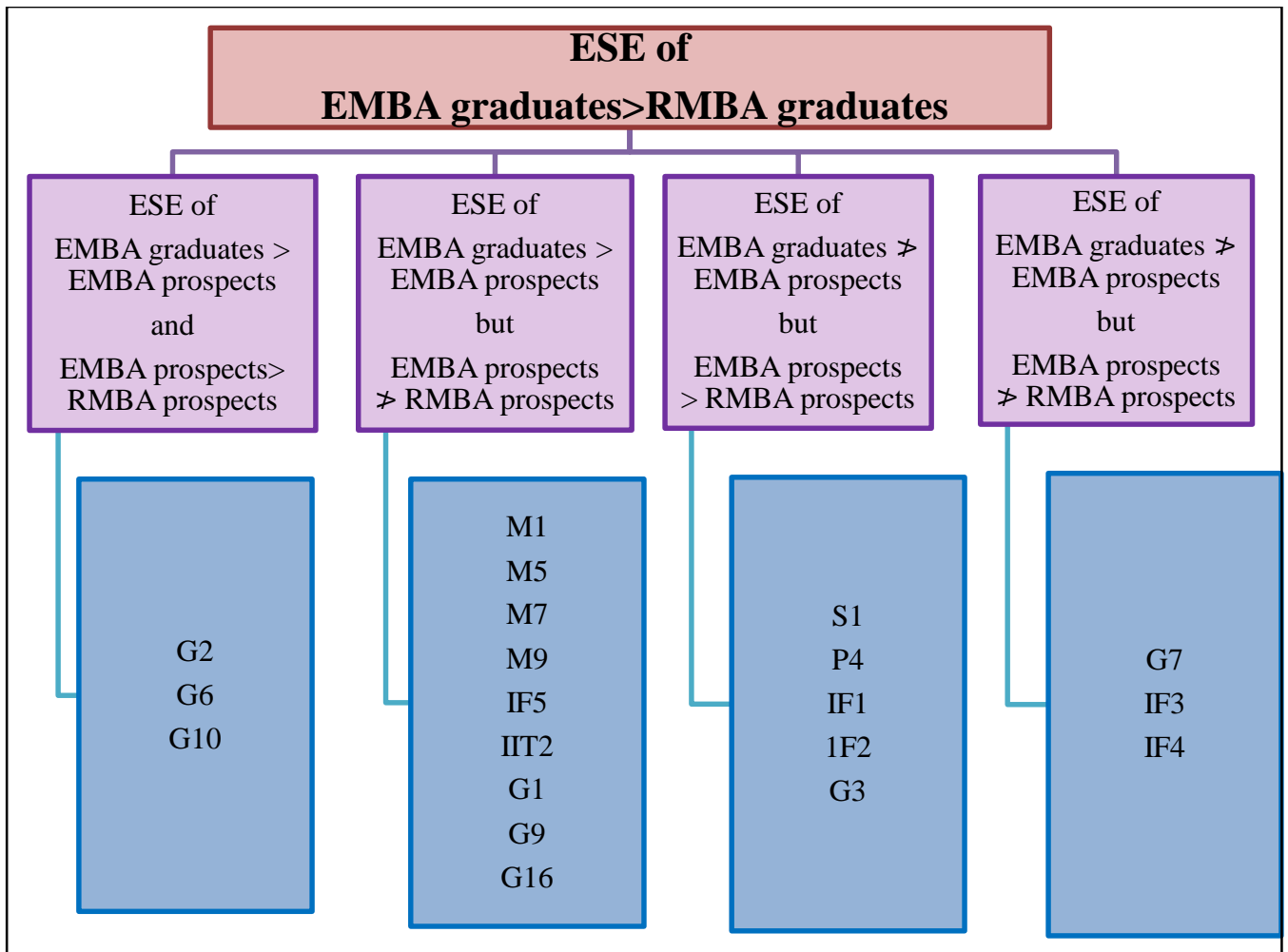


Figure 7-1 :Tasks where ESE of EMBA graduates is significantly higher than RMBA graduates

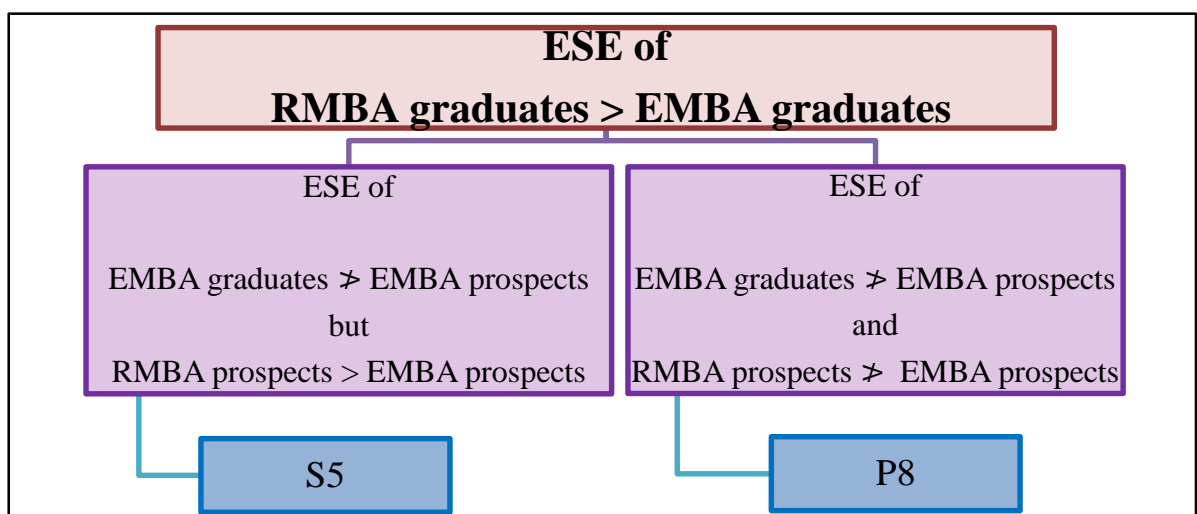
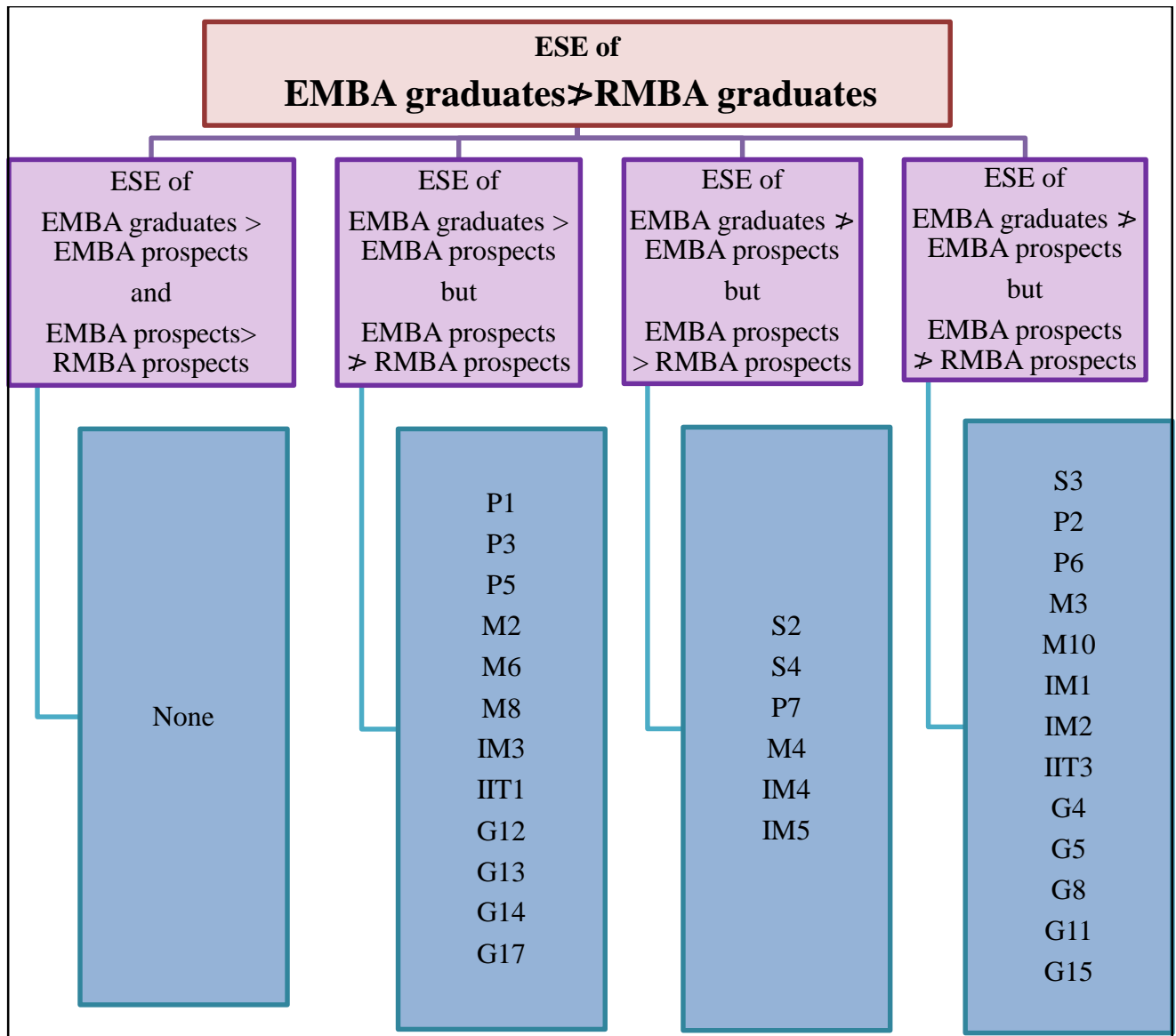


Figure 7--2: Tasks where ESE of RMBA graduates is significantly higher than EMBA graduates



*Figure 7-3: Tasks where ESE of EMBA graduates and RMBA graduates is not significantly different*

Based upon the above conclusion, different tasks have been categorized into 5 categories. The categories and criteria for classification along with the tasks in each category is mentioned below.

**Category-1- Tasks with very high influence of EMBA on ESE is (EMBA performing very good)**

- **Criteria: Significant difference between EMBA and RMBA graduates ESE as well as ESE of EMBA graduates and prospects ESE but no significant difference in ESE of EMBA and RMBA prospects**

- **Tasks:**
  - Estimating start-up capital requirement(M1)
  - Liaison and obtaining required licenses(M5)
  - Developing relationship with people connected to sources of capital(M7)
  - Convincing bank to lend money(M9)
  - Developing financial control systems (IF5)
  - Identifying and implementing appropriate software (IIT2)
  - Applying appropriate intellectual property to protect the idea/venture (G1)
  - Taking decisions involving risks (G9)
  - Designing product/service to solve customer problem(G16)

**Category-2- Tasks with high influence of EMBA on ESE (EMBA performing good)**

- **Criteria: Significant difference between EMBA and RMBA graduates ESE as well as ESE of EMBA graduates and prospects ESE but EMBA prospects also have higher ESE than RMBA prospects** (so the difference between graduates cannot be completely attributed to education type)
- **Tasks:**
  - Dealing effectively with day to day problems(G2)
  - Perseverance during setbacks (G6)
  - Dealing with uncertainty in pursuing entrepreneurial career(G10)

**Category-3- Tasks with moderate influence of EMBA on ESE (EMBA performing average)**

- **Criteria-1: Significant difference between EMBA and RMBA graduates ESE and EMBA and RMBA prospects but no significant difference in ESE of EMBA graduates and prospects**
- **Tasks:**
  - Opportunity Recognition(S1)
  - Selecting most appropriate legal form of business(P4)
  - Maintaining financial records (IF1)
  - Managing financial assets of the business (IF2)
  - Preparing growth strategy for business(G3)

- **Criteria-2: Significant difference between EMBA and RMBA graduates ESE but no significant difference in ESE of EMBA graduates and prospects as well as EMBA and RMBA prospects**
- **Tasks:**
  - Interpreting financial statements (IF3)
  - Maintaining balance between assets and liabilities (IF4)
  - Surviving in times of economic slowdown (G7)
- **Criteria-3: No significant difference between EMBA and RMBA graduates ESE as well as EMBA and RMBA prospects ESE but ESE of EMBA graduates is higher than EMBA prospects**
- **Tasks:**
  - Anticipating potential problems of business (P1)
  - Creating action plan to launch the idea (P3)
  - Determining market segment (P5)
  - Estimating the working capital requirement(M2)
  - Identifying potential sources of investment (M6)
  - Valuation of start-up(M8)
  - Delegating tasks and responsibilities appropriately (IM3)
  - Formulating digital marketing strategy (IIT1)
  - Working on collaborative projects(G12)
  - Leading a mutually disagreeing group(G13)
  - Resolving group conflict(G14)
  - Problem solving (G17)

**Category-4- Tasks with low influence of EMBA on ESE (EMBA performing below average)**

- **Criteria: No significant difference between EMBA and RMBA graduates ESE as well as EMBA graduates and prospects ESE as well as EMBA and RMBA prospects**
- **Tasks:**
  - Brainstorming for idea generation (S3)
  - Identifying most feasible idea(P2)
  - Estimating market size(P6)
  - Writing complete business plan (M3)

- Convincing potential investors(M10)
- Recognizing and recruiting the employees for the business (IM1)
- Training employees (IM2)
- Using e-commerce to start or scale the venture (IIT3)
- Developing working environment that encourages innovation(G4)
- Developing appropriate exit strategy(G5)
- Tolerating unexpected changes in business conditions(G8)
- Generating revolutionary idea(G11)
- Motivating group members to work longer (G15)

**Category-5- Tasks with very low influence of EMBA on ESE (EMBA performing much below average)**

- **Criteria-1: No significant difference between EMBA and RMBA graduates ESE as well as EMBA graduates and prospects ESE although EMBA prospects ESE is higher than RMBA prospects**
- **Tasks:**
  - Idea generation(S2)
  - Product/Prototype designing (S4)
  - Determining appropriate pricing (P7)
  - Networking (M4)
  - Supervising employees (IM4)
  - Encouraging and motivating employees (IM5)
- **Criteria-2: RMBA graduates ESE is greater than EMBA graduates and no difference in ESE of EMBA graduates and prospects**
- **Tasks:**
  - Conducting market research for idea generated(S5)
  - Selecting right advertising campaign for launching the product/service(P8)

Overall, it can be concluded that entrepreneurship education significantly increases overall ESE of the respondents. Also, EMBA graduates have significantly higher ESE than RMBA graduates considering all the tasks involved in venture creation taken together. However, there are certain tasks particularly related to idea generation, marketing and team building where more inputs of entrepreneurship education are required for the holistic outcome of educational intervention on ESE of respondents.



### **7.2.3 Conclusion with respect to influence of demographic variables on ESE and their role as moderating variable**

The study on entrepreneurial behaviour is incomplete without taking into consideration demographic variables. In fact, various previous studies have established the dominant role of demographic variables like gender and family background in predicting an individual's decision to pursue entrepreneurial career. Shinnar et al. (2014) recommended that inclusion of demographic factors as moderating variables in studies pertaining to influence of entrepreneurship education would help in better understanding and explaining the results of such studies. The present study, therefore takes into consideration four demographic variables i.e. gender, family background, prior work experience and prior entrepreneurial experience and examine the influence of these variables in moderating the impact of entrepreneurship education on ESE of respondents using two-way mixed method ANOVA. The interaction effect is further analysed with the help of profile plots. In addition, the direct influence of demographic variables on ESE of respondents is also explored using ANOVA and post hoc ANOVA, if required.

#### **i) Conclusion on influence of gender on ESE**

Gender does not significantly moderate the impact of entrepreneurship education on ESE. Nevertheless, the gender differences in ESE cannot be completely ignored. Difference in ESE of male vs female respondents as well as male vs female prospects is near to significant. However, EMBA significantly influences ESE of males as well as nearly significantly influences ESE of female, thereby resulting into no significant difference in ESE of male and female graduates. Hence it can be concluded that though difference exist between male and female ESE but and entrepreneurship education may help to overcome those differences.

#### **ii) Conclusion on role of family background**

The role of family background on ESE is examined through four aspects including: (a) influence of involvement of father, mother, both or none of them in business on ESE (b) influence of involvement of parents, siblings, close friends and close relatives in business on ESE (c) influence of interaction with family members about their business on ESE (d) influence of involvement in family business on ESE and (e) influence of level of involvement in family business on ESE. The conclusion with respect to each of these five aspects is mentioned below:

- a) Majority of the respondents have entrepreneurial fathers but only few respondents have entrepreneurial mothers. Involvement of both parents in business results in higher ESE but not significantly higher when compared to those with one or none of the parents in business. Entrepreneurship education significantly enhances ESE for respondents with none of the parents in business as well as respondents with both parents in business, thereby refuting any significant moderating role of involvement of parent/s in influencing the impact of entrepreneurship education on ESE.
- b) Involvement of parents, siblings, close friends and close relatives positively influences ESE. Moreover, involvement of siblings in business has the highest influence followed by the influence of close friends in business on ESE of respondents. Entrepreneurship education enhances ESE for majority of the respondents with or without any aforementioned family members involved in business. Hence, although involvement of family members in business influences but it does not moderate the influence of entrepreneurship education on ESE.
- c) Majority of the respondents hailing from family business background interact with their family members regarding business but the interaction with close friends and relatives yields more positive and significant influence on ESE compared to interaction with parents and siblings.
- d) Prior involvement in business with any of the family members positively influences ESE. EMBA graduates as well as prospects with prior involvement in family business have higher ESE compared to those with no such involvement in family business. Entrepreneurship education on the other hand, enhances ESE of both the groups (with and without involvement) in family business.
- e) Level of involvement in family business significantly influences ESE. Respondents with higher involvement in family business have higher ESE. However, level of involvement in family business does not moderate the impact of entrepreneurship education on ESE.

Overall, it can be concluded that entrepreneurial siblings and close friends in business have higher influence on ESE as compared to entrepreneurial parents. Involvement in family business also positively influence ESE. Lesser influence of involvement of parents on ESE may be attributed to close exposure of the respondents to varied facets of entrepreneurship. Having entrepreneurial parents does orient an individual to the required skills and knowledge for starting a new venture, but it also exposes him/her to the arduous challenges of pursuing

an entrepreneurial career. Hence, family background is found to influence ESE, but not moderate the influence of entrepreneurship education on ESE.

**iii) Conclusion on role of prior work experience**

Prior work-experience positively influences ESE of respondents but ESE of EMBA graduates with and without prior experience is not significantly different. Both the groups of respondents (i.e. with and without prior work experience) benefit from entrepreneurship education. However, EMBA enhances ESE of respondents without prior work experience more than for those with prior work-experience. Also, duration of work experience does not significantly influence ESE of respondents.

**iv) Conclusion on role of prior entrepreneurial experience**

Individuals with prior entrepreneurial experience have higher ESE than those without any experience of starting and running their own venture. However, individuals without entrepreneurial experience benefit much more from entrepreneurship education compared to those with entrepreneurial experience. Entrepreneurship education bridges the gap in the ESE of respondents with and without entrepreneurial experience to a considerable extent. This also suggests that the scope of enhancing ESE through current entrepreneurship education intervention is very limited for those with prior entrepreneurial experience. However, varying duration of entrepreneurial experience does not significantly influence the ESE. These results are concluded in a restricted context as only one-fourth of the respondents in the current study had prior entrepreneurial experience and duration of experience for majority of respondents with experience was limited to one year only.

Overall, in regard to the role of demographic variables in influencing the ESE, it can be concluded that prior work-experience, prior entrepreneurial experience, involvement in family business, having entrepreneurial siblings and interacting with friends and close relatives about business significantly influences ESE of the individuals. This suggests, that exposure to entrepreneurship in any form has positive influence on enhancing ESE of an individual towards entrepreneurial tasks. Entrepreneurship education, on the other hand enhances the ESE of all groups of individuals classified on the basis of different demography. Nevertheless, the influence of entrepreneurship education is more on males than females, more on those with involvement in family business than those with no involvement in family business, more on those without work experience and entrepreneurial experience compared to those with prior work experience and entrepreneurial experience respectively.

### **7.3 Recommendation**

The findings of the present study would be useful for institutes providing entrepreneurship education, entrepreneurship educators as well as students enrolling for long term entrepreneurship education programs. Based on the findings of this research, we may suggest that though entrepreneurship education significantly enhances the ESE of the participants, relevant inputs in the following areas may contribute in augmenting the effectiveness of entrepreneurship education.

Following areas with further scope of improvement have been identified based on quantitative data collected from EMBA and RMBA prospects and graduates as well as based on the in-depth interviews of entrepreneurship education alumni currently pursuing entrepreneurship. The suggestions are further divided into three sections, i) suggestion related to improvement of content offered in entrepreneurship education ii) suggestions related to improvement of pedagogy of entrepreneurship education and iii) suggestions related to improvement in selection criteria of entrepreneurship education candidates.

**i) Suggestions for further scope of improvement in Entrepreneurship education (content) in the Indian context:**

- ❖ Workshops to be conducted on generation of innovative idea
- ❖ Assistance to be provided in prototype development
- ❖ Support to be provided in feasibility testing of the idea
- ❖ Guidance on estimating the market size for new product/service
- ❖ Guidance on determining the appropriate price of the new product/service
- ❖ Guidance on appropriate marketing strategy for introducing the product/service in the market
- ❖ Greater and more relevant networking opportunities
- ❖ Guidance on preparing exit strategy and its execution
- ❖ Guidance on team building and selecting the initial employees
- ❖ IT skills to be imparted for enhancing the operational efficiency of the venture

**ii) Suggestions for further scope of improvement in Entrepreneurship education (pedagogy) in the Indian context:**

- ❖ More focus on local and Indian entrepreneurial case-studies rather than case-studies of multi-national companies

- ❖ Enhanced use of simulation exercises for improvised decision making in real-life business situation
- ❖ Real time exposure on presenting business idea to group of investors
- ❖ One to one association with entrepreneurs in the similar industry
- ❖ Extended internship in start-ups

In addition to the suggestion related to content and pedagogy of entrepreneurship education, another important concern expressed by most of the entrepreneurs who were interviewed was related to in-take of appropriate candidates for entrepreneurship education programs. Huge disparity was observed by entrepreneurship education alumni in terms of sincerity, dedication and focus among the students in their batch which, they believed diluted the over-all quality of the program. It is proposed that prospective candidates who apply for entrepreneurship education should be shortlisted based on aptitude test measuring the sincerity of the candidate towards entrepreneurial career. In addition, homogeneity among the batch of students in terms of their stage of entrepreneurial career will be further helpful in enhancing the efficacy of the program.

Substantial difference in perception towards effectiveness of entrepreneurship education was observed among the entrepreneurs who joined the program with a pre-existing business idea as compared to those who joined the program without any entrepreneurial venture idea. Many of the entrepreneurs during the interview commented that they spent considerable time in the first year of their entrepreneurship education in searching for an idea and hence could not practically apply many concepts taught in the first year simultaneously which others students with pre-existing business idea could do.

Moreover, as the findings suggest that the inputs provided in terms of idea generation and feasibility testing are limited, those students without initial idea faced more challenges during the course and found the course to be less effective.

The findings from the analysis of data related to influence of demographic variables on ESE highlighted that involvement of siblings and close friends in business, involvement in business, prior work experience and prior entrepreneurial experience has significant positive influence on ESE of respondents.

Entrepreneurship education more significantly increases ESE of respondents involved in business as compared to those not involved in business; without prior work experience as compared to those without prior work experience and without prior entrepreneurial experience as compared to those without prior entrepreneurial experience. This indicates that

entrepreneurship education would differently benefit those with and without any prior experience and those with prior experience derived comparatively lesser benefit from the existing entrepreneurship education programs.

In order to enhance the efficacy of the program for experienced candidates further advanced inputs might be required. Also, among the candidates coming from family business background, those who were involved in business benefitted more from the program. Similar feedback was received during qualitative interviews where the entrepreneurs felt that working in family business for some time before joining the entrepreneurship education would have enriched their learnings from the course.

**iii) Suggestions for further scope of improvement in Entrepreneurship education (selection criteria) in the Indian context~~Suggestions for selection of candidates for entrepreneurship education programs:~~**

- ❖ All the students who apply for the program should undergo an aptitude test measuring the commitment of the candidate towards entrepreneurial career in addition to the regular entrance test which is administered as a part of admission screening process.
- ❖ There should be uniformity among the students selected for entrepreneurship education program in terms of pre-existing entrepreneurial venture idea. Either all the students admitted to should have a pre-existing entrepreneurial idea verified for its feasibility during the admission process or all the students admitted should still be working on business idea generation. For the later scenario, course should then provide comprehensive inputs and mentoring on idea generation and feasibility testing during the first semester. In case, mixed group of students with and without entrepreneurial idea are admitted to the course, students without entrepreneurial idea should be provided additional bridge course including workshops on idea generation and mentoring assistance from entrepreneurs so that the disparity between the two groups can be narrowed within the initial phase of the program.
- ❖ Candidates with family business background admitted to the entrepreneurship education program should have worked in their family business for some duration. It would enhance their sincerity as well as understanding of the inputs provided in the course thereby benefitting more from entrepreneurship education.

In the line of the above suggestions, if required amendments are made in the specific content of entrepreneurship and approach towards teaching entrepreneurship, the efficacy of entrepreneurship education programs is expected to enhance further. Additionally, entrepreneurship education would be able to better differentiate itself from regular management education, thereby specifically addressing the requirements of aspiring entrepreneurs. In the current context, with enhanced global as well as local emphasis on entrepreneurship, apposite entrepreneurship education programs can prove as a catalyst for enriched entrepreneurship ecosystem.

#### **7.4 Limitation and Scope for further study**

- ❖ One of the limitations of the present study is that it considers two-year entrepreneurship education as a whole without further assessing the content, instructor profile and pedagogy adopted by the various institutions taken into consideration. Nevertheless, elementary review of course structure of two-year entrepreneurship program offered by various institutions revealed considerable amount of similarity. In order to provide institute specific suggestions for increasing the efficacy of entrepreneurship education, further detailed assessment of course structure, instructor methodology and student profile is recommended. Hence, the findings of the present study can be implemented by any existing or upcoming entrepreneurship education program to understand the student expectation from entrepreneurship education as well as critical success factors for enhanced efficacy of entrepreneurship education.
- ❖ Secondly, the study relies on the antecedent of entrepreneurial behaviour and not the realization of entrepreneurial behaviour post entrepreneurship education. Further longitudinal study with larger sample size is recommended to substantiate entrepreneurial actions and entrepreneurial self-efficacy of entrepreneurship education graduates. Longitudinal study can directly demonstrate impact of entrepreneurship education on actual entrepreneurial behaviour. Nevertheless, adequate empirical studies in literature have established the rationality of ~~prediction~~ prediction of entrepreneurial behaviour based on entrepreneurial self-efficacy and intention. Moreover, the current research also includes study of actual entrepreneurial behaviour of 30 entrepreneurship education graduates at varied time frames after completion of their education through in-depth interviews.
- ❖ Thirdly due to long-term nature of entrepreneurship educational intervention considered in the present study and limitation in approaching the same students before and after

their entrepreneurship education, pre-post experimental research design is not adopted for measuring the change in their entrepreneurial self-efficacy. Institutes offering entrepreneurship education may officially conduct mandatory pre-post measurement of entrepreneurial self-efficacy using entrepreneurial self-efficacy instrument validated in the present study to analyse the strengths and weakness of their respective entrepreneurship program. This would be helpful in enhancing the relevance of entrepreneurship education at particular institutions and thereby collectively augmenting quality of entrepreneurship education across the nation.

The findings of the study suggest that prior entrepreneurial exposure as well as prior work experience significantly influences entrepreneurial self-efficacy but we could not substantially establish the differential influence of different duration of work experience and entrepreneurial exposure on ESE due to very small number of respondents with work experience or entrepreneurial exposure of greater than one year. The present study depicts fewer individuals join entrepreneurship education after undertaking work experience or entrepreneurial experience of more than one year. Hence, it is recommended that future study with much larger sample size should be conducted to understand the influence of varying duration of work experience or entrepreneurial exposure on ESE.

Further studies aiming to enhance the domain of knowledge regarding the influence and efficacy of long-term entrepreneurship education may consider additional variables like academic performance and prior educational background of the students undertaking entrepreneurship education.

Measuring the influence of entrepreneurship education on entrepreneurial self-efficacy of the respondents with varying academic performance during their entrepreneurship course can be helpful in understanding the influence of diligence and sincerity of an individual on the effectiveness of entrepreneurship education.

As the outcome of the qualitative study suggests that disparity in the seriousness of students towards entrepreneurial career dilutes the quality of entrepreneurship education, inclusion of this variable may further help in empirically establishing this finding. Comparison of groups with different academic performance before and during the entrepreneurship course, can be helpful in identifying the tasks for which entrepreneurship education could not enhance the self-efficacy despite of sincere efforts of the participant. Study of prior education background will be help in understanding whether entrepreneurship education differentially and similarly



benefits the students from different backgrounds like science, commerce, engineering, humanities etc.

Finally, the present study only takes into consideration the respondents from the entrepreneurship education institutes located in western part of the country as it boasts of most prominent entrepreneurship education institutes in India. But, recently more number of institutes across the country have been given AICTE approval to offer full time two-year post-graduate entrepreneurship education program, hence further studies should consider larger sample size as well as inclusion of participants from institutes across varied geography in India. This would be further helpful in generalization of the results and identifying the core lacunas for enhancing entrepreneurship education efficacy in India.

