

# THE INFLUENCE OF MANAGEMENT EDUCATION ON ENTREPRENEURSHIP SUCCESS

Ashok Kumar Sar, KIIT School of Management

## ABSTRACT

*Management education started in India with a view to support entrepreneurship. However, over a period of time, debated have been taking place on the purposefulness of management education in India. The purpose of this paper is to examine the purposefulness of management education at post-graduate level in India. A review of literature on management skills and entrepreneurship success is done to develop a framework for linking management skills with entrepreneurship success. Data from 432 MBA graduates engaged as entrepreneurs is used in the study. Factor analysis, correlation and regression are applied to test the associated hypotheses. The findings suggest that management education can have positive influence on entrepreneurship success. The value of management education has been an understudied area. Thus this study brings valuable insights for management education, equally for educators, aspiring entrepreneurs.*

**Keywords:** Management Education, Management Skills, Entrepreneurship Success, MBA.

## INTRODUCTION

The relevance of management education and the mushrooming of business schools in India has been a topic of debate and discussions in both policy circles as well as intellectual circles. Management education at post graduate level has been a preferred discipline of higher studies, as these graduates from top tier business school get excellent career opportunities in the corporate world. However, the placement reports of Top B-schools every year are showing a great sign for the future entrepreneurship, as several young minds are rejecting lucrative job offers from MNCs and are focusing on fulfilling their entrepreneurial dreams. Earlier in India, people were only interested in Indian entrepreneurs who came from the US. Now, they are more interested in Indian entrepreneurs coming from India. Entrepreneurship is beginning to be the preferred choice as compared to earlier when it wasn't considered the best choice. Radovic-Markovic & Salamzadeh (2012) have articulated opportunities to consider business prospects and turn their unique ideas into entrepreneurial activities.

Top business schools across India have realigned their curriculum and teaching-learning process to develop competencies for successful entrepreneurship. The social, technological, economic and political (STEP) environment in India has been growing in complexity as well as dynamism over the last decade. This has necessitated identification of a permanent, fixed and stable point, which serves as a perspective and helps manage the change and complexity. Management skills, are the basic behavioral dimensions that lie at the heart of effective, satisfying, growth-producing human relationships has remained and continues to remain constant (Whetten & Cameron, 2011). Management skills would serve as these fixed points, which are key to effective personal, interpersonal and organizational performance.

Conceptual background and hypothesis development in the paper covers review of literature concerning entrepreneurship success, personal skills, interpersonal skills and group skills. Under each of the management skills, associated components are covered and how they relate to entrepreneurial success based on past research. Constructs capturing associated attributed are developed from existing literature and a survey method is used to capture data for analysis. Data captured through survey is analyzed using SPSS to gain insights into the influence of management skills on entrepreneurial success.

## CONCEPTUAL BACKGROUND AND HYPOTHESES DEVELOPMENT

A model integrating theory of management skills (Whetten & Cameron, 2011), which reflects the skills acquired by individuals and their influence on entrepreneurship success is developed. Conventional cognitive-based curriculum to develop technical skills without management skill development doesn't correlate with entrepreneurship success (Cohen, 1984). A summary of 108 studies by Cohen, stated low correlation between grade-point and entrepreneurship success. The mean correlation was 0.18 and in no case exceeds 0.20. Thus, the result from Cohen's study reflects that attending education to get a degree and high grade point is necessary but not sufficient condition for entrepreneurship success. The integration of technical skills with theory of management skills suggests that investment in development of technical and management skills will result in positive influence on entrepreneurship success.

### Entrepreneurship Success

One of the MBA program outcomes is seeing MBA graduates getting engaged in start-ups/starting new business ventures. While the outcomes related to acquiring domain knowledge can never be undermined, they are being considered to be the means to quality entrepreneurship. The importance and significance of quality entrepreneurship figures prominently in the National Institutional Ranking Framework (NIRF), Ministry of Human Resource Development, Government of India. In India culture and sub-cultures within the broad culture in various regions impact entrepreneurship success (Valliere, 2017). A study by Bhagavatula, Mudambi & Murmann (2017) captured features of the innovation and entrepreneurship ecosystem in India, evidencing that innovation and entrepreneurship dynamics in transforming economies differ from like processes in advanced market economies in significant ways. The perception of being successful in securing an entrepreneurship opportunity through business incubator at the University/B-school relate to five factors, a) ability to create customer value proposition(s) alignment with a set of emerging technologies, b) securing venture capital, c) creating a close team of peers, d) have access to common/shared physical infrastructure and e) supportive regulatory framework. Global Entrepreneurship Index provides fourteen pillars to measure entrepreneurship success. The fourteen pillars are, a) Opportunity Perception, b) start-up skills, c) risk acceptance, d) networking, e) cultural support, f) opportunity perception, g) technology absorption, h) human capital, i) competition, j) product innovation, k) process innovation, l) high growth, k) internationalization and l) risk capital (Lloyd, 2017). Ahmad & Hoffman (2007) developed a set of indicators capturing entrepreneurship performance at three levels, a) firms, b) employment and c) wealth creation. Success of start-ups can be associated with identification of an idea or opportunity by an entrepreneur who subsequently organizes a series of activities, mobilizes resources and creates competence using his/her networks in an environment in order to create value (Aidin Salamzadeh & Kirby, 2017). To increase the rate of success, start-ups need to

take a process view, which aids in better understanding of how venture ideas can turn into value (Salamzadeh, 2015). In a study of undergraduate students in three universities, Salamzadeh, Farjadian, Amirabadi & Modarresi (2014) identified eight traits, such as, 1) open mindedness; 2) need for achievement; 3) pragmatism; 4) tolerance of ambiguity; 5) visionary; 6) challenge taking; 7) risk taking; and 8) internal locus of control, for entrepreneurial success.

## **Management Skills**

Management skills are behavioral characteristics, which are controllable and developable and not personality attributes or any stylistic tendencies (Whetten & Cameron, 2011). The management skills can be contradictory or paradoxical and skills can be interrelated or overlapping. Whetten & Cameron (Whetten & Cameron, 2011) focused on aspects related to skills identified in prior research as critical to leadership and management. Management skills consist of identifiable sets of actions that individuals perform and that lead to certain outcomes. Skills can be observed by others, unlike attributes that are purely mental or are embedded in personality. There are primarily ten skills in three sets, a) personal skills, b) interpersonal skills and c) group skills, which are discussed in the next section.

## **Personal Skills**

These skills focus on issues relate to the management of the self-hence they are called personal skills. They cover: developing self-awareness, managing personal stress and solving problems analytically and creatively. Each of this skill sets would include a cluster of related behaviors, not just one single, simple skill.

### **Developing Self-Awareness and Entrepreneurship Success**

The focal point of improving management skills is the “self-concept”, which reflects the knowledge that individuals possess about them (Brouwer, 1964; Rogers, 1961). As per several prior research, better health, superior performance in management and leadership roles and higher productivity at work, have been characteristics of people who are highly aware of themselves (Boyatzis, 1982; Cervone, 1997; Spencer & Spencer, 1993). At another level awareness about self can hinder individual growth as one may tend to be anxious of any knowledge that may make one perceive to be inferior, weak, worthless, evil or shameful (Maslow, 1962). Therefore, when encountering information about self, which are perceived to be inconsistent with the self-concept, individuals can get into defensive routines or be protective about them.

### **Managing Personal Stress and Entrepreneurship Success**

Work place stress, a common destroyer of value in businesses, is driven by incompetent management, which was reflected in a twenty-five year period study (Whetten & Cameron, 2011). Besides affecting the persons negatively, stress also produces equally detrimental consequences, which many times are not visible (Auerbach, 1998; Staw, Sandelands & Dutton, 1981; Weik, 1993). Reflecting on the existence of organizations and individuals in an environment filled with reinforcing and opposing forces, Kurt Lewin (Lewin, 1951) termed the opposing forces as stressors, which act to inhibit or stimulate performance. A feelings of stress, is an aggregation of certain stressors which are driving forces in Lewin’s model of stress.

Entrepreneurs need to learn to manage stress through resiliency which would result in an equilibrium, after completing reaction in three stages, a) “an alarm stage”, b) “a resistance stage” and c) “an exhaustion stage” (Auerbach, 1998; Cooper, 1998; Selye, 1976).

### **Solving Problems Analytically and Creatively and Entrepreneurship Success**

Problem solving skills are required in almost every aspect of life. Skillful creative problem solving correlates strongly with organizational success (Sternberg, 1999). The conventional approach to problem solving comprise of four steps, a) defining the problem, b) generating alternatives, c) evaluate alternatives, d) select an alternative and e) implement and follow up on the solution (March, 1994; Miller, Hickson & Wilson, 1996; Mitroff, 1998; Zeitz, 1999). However, there are constraints in real time necessitating deviation from the four step of an analytical problem solving approach owing to increase in complexity and dynamism in the problem arena. Thus the emergence of the concept creative problem solving, which is based on the “competing values framework” (Cameron, Quinn, DeGraff & Thakor, 2006). Four different types of creativity, a) imagination, b) improvement, c) investment and d) incubation have been established to guide the decision maker on creative problem solving (DeGraff & Lawrence, 2002).

The analysis of the three personal skills leads to the first hypothesis:

*H<sub>1</sub>: Personal skills gained via business management education lead to entrepreneurship success.*

### **Interpersonal Skills**

Positive relationship enables effective learning and superior performance at work. It has been found to critical to maintain good health as it strengthens cardiovascular, hormonal and immune systems (Dutton, 2003; Heaphy & Dutton, 2006; Reis & Gable, 2003). The positive relationship is derived from positive energy, which is an outcome of positive interpersonal relationship (Baker, 2000; Dutton, 2003). Important physiological, emotional, intellectual and social consequences result from building relationships that create energy. (Whetten & Cameron, 2011) have reflected on four aspects to capture the associated skills, a) “building relationships by communicating supportively”, b) “gaining power and influence”, c) “motivating others” and d) “managing conflict”. In the next section these four skills are discussed to build the 2<sup>nd</sup> hypothesis.

### **Building Relationship by Communicating Supportively and Entrepreneurship Success**

Supportive communication, refers to the relational communication that helps you to communicate correctly and truthfully, especially in problematic settings without endangering relational associations (Whetten & Cameron, 2011). They have prescribed eight principles, to make the communication supportive, which in turn are keys to success, a) congruence and not incongruence, b) descriptive and not evaluative, c) problem-oriented, not person-oriented, d) validates (helps people to feel recognized, understood, accepted and valued) rather than invalidates (arousing damaging feelings about self-esteem, individuality and kinship with others), e) specific (useful), not global (non-useful), f) conjunctive (a message is joined to previous one in some way), not disjunctive, g) owned (recognizing that the source of the ideas is

oneself and not another person or group is owing a message), not disowned and h) supportive listening, not one-way message delivery.

### **Gaining Power and Influence and Entrepreneurship Success**

According to a Fortune magazine report, it is observed that in the ambitious new generation entrepreneurs, there is a very strong orientation to gain power and translate the power gained to influence (Leger, 2000). If one has to maximize ones potential as a power holder, one has to develop personal attributes like expertise, personal attraction, effort and legitimacy and position characteristics like centrality, flexibility, visibility and relevance, leading to one becoming a strong person in a strong position. Power without influence is not sufficient. Power is converted to influence when the target individual consents to behave according to the desires of the power holder. There are three popular influence strategies, a) retribution-force others to do what you say, b) reciprocity-help others to do what you say and c) reason-show others that it makes sense to do what you say (Allen, Madison, Porter, Renwick & Mayes, 1979; Kipnis, 1987; David Kipnis, Schmidt & Wilkinson, 1980).

### **Motivating Others and Entrepreneurship Success**

Various organizational behavior scholars have suggested the determinants of task performance to be a function of ability (a function of resources, aptitude and training) and motivation (a function of commitment and desire) (Gerhart, 2003; Steers, Porter & Bigley, 1996; Vroom, 1964). With reference to the unprecedented seventh win on the NBA title in professional basketball, it was said that you can't motivate someone, all that you can do is provide a motivating environment and the players will motivate themselves (Jackson, 2000). The purpose acquiring motivation skills is twofold, firstly, managers can help persons to reach their potential and secondly, entrepreneurs can effectively modify their employees' behavior, focused on both satisfaction and performance (Harter, Schmidt & Hayes, 2002). Whetten & Cameron (Whetten & Cameron, 2011) suggested an integrated motivation skill development framework with six elements, a) establish moderately difficult goals that are understood and accepted, b) remove personal and organizational obstacles to performance, c) use rewards and discipline appropriately to extinguish unacceptable behavior and encourage exceptional performance, d) provide salient internal as well as external incentives, e) distribute rewards equitably and f) provide timely rewards and specific, accurate and honest feedback on performance.

### **Managing Conflict and Entrepreneurship Success**

Given the current trend towards workforce diversity, globalization and networked organizational structures, interpersonal conflict has become a necessary and pervasive part of organizational life and how entrepreneurs from diverse spheres and cultures handle conflict is an increasingly important predictor of success (Nemeth, 2004; Seybolt & Neilson, 1996; Tjosvold, 1991). Effective conflict management involves both behavioral and analytic elements. The analytical process involves diagnosing the sources of conflict; the key contextual contemplations and individual inclinations that must be factored into choosing the fitting conflict management style. The behavioral constituent of the procedure encompasses employing the selected approach to resolve the conflict. Whetten and Cameron (Whetten & Cameron, 2011) have proposed four sources of interpersonal conflict, a) personal differences, b) informational differences, c) role

incompatibility and d) environmental stress; and four situational considerations, a) issue importance, b) relationship importance, c) relative power and d) time constraints.

The analysis of the three interpersonal skills leads to the second hypothesis:

*H<sub>2</sub>: Inter personal skills gained via business management education lead to entrepreneurship success.*

## **Group Skills**

This section covers three skills: “Empowering and Delegating”, “Building Effective Teams” and “Teamwork” and “Leading Positive Change”. When involved with groups of individuals either a leader or as a member, issues concerning the skills under reference become the focus of attention of entrepreneurs. With growing complexity and dynamism in the work environment, understanding, appreciating and managing interdependencies become critical to success (Mannix & Jehn, 2003).

### **Empowering and Delegating and Entrepreneurship Success**

When organizations face decline, turbulence, downsizing and change, negative attributes or attitudes emerge. Cameron (Cameron, 1994) identified twelve negative attributes and labeled them as “the dirty dozen”. The key to overcoming these negative attributes lie in empowerment, which means helping to develop in others a sense of meaning and trust, personal control, self-determination and self-efficacy (Mishra, 1992; Spreitzer, 1992). Thus learning to become a competent empowering entrepreneur is a critical skill. A structured approach to develop empowerment skills to empower others reflect nine specific prescriptions, a) creating confidence, b) connecting to outcomes, c) providing necessary resources, d) providing necessary information, e) creating emotional arousal, f) providing support, g) modeling, h) fostering personal mastery experience and i) articulating a clear vision and goals (Bandura, 1986; Hackman, Oldham, Janson & Purdy, 1975; Kanter, 1983; Quinn & Spreitzer, 1997; Wrzesniewski, 2003). Whetten & Cameron have developed three principles for empowered delegation: when to delegate, whom to delegate and how to delegate, linking the delegation process with the outcomes.

### **Building Effective Teams and Teamwork and Entrepreneurship Success**

With growing complexity of tasks at work places, superordinate goals have become a reality in the digital era, more so, as the number of stakeholders rise with inclusion of complementors. To achieve one’s own goals, one need to manage several interdependencies, as teams is becoming increasingly prevalent in the workplace. Teams have been shown to be powerful tools to improve the performance of individuals and organizations. Whetten & Cameron (Whetten & Cameron, 2011) have highlighted two critical aspects of team leadership: a) developing credibility and influence among team members and b) establishing a motivating vision and goals for the team. These aspects have their roots in several prior scholarly literature (Edmondson, 1999; Hackman, 1990).

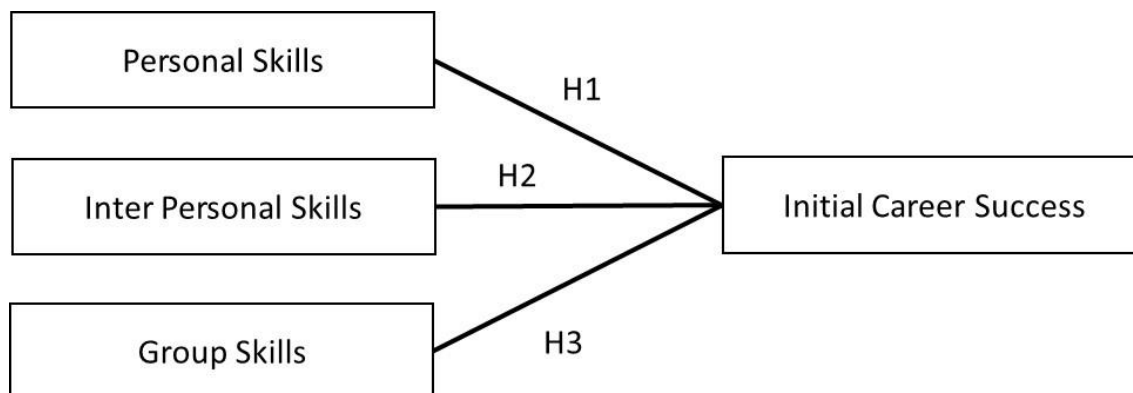
### **Leading Positive Change and Entrepreneurship Success**

The set of skills necessary to effectively handling change are complex and not easy to master. Whetten & Cameron (Whetten & Cameron, 2011) have articulated an approach called as “heliotropic effect”, focused on positive targets rather than problem-centered targets. Inspiring

language, aspirational targets, key strengths, positive energy and fostering virtuousness are some of the proven means to unlock the heliotropic effect. The concept, borrowed from botany, refers to the tendency of certain plants to continually turn towards sunlight. “Like a plant that grows in the direction of the light source, individuals and groups strive to grow towards the positive image they hold”. within organizations and individuals, the effect has been demonstrated in five prominent ways, a) socially, b) visually c) emotionally, d) psychologically and e) physiologically (Cooperrider, 1990).

The analysis of the three group skills leads to the third hypothesis:

*H<sub>3</sub>: Group skills gained via business management education lead to entrepreneurship success.*



**Figure 1**  
**CONCEPTUAL MODEL DEPICTING THE INFLUENCE OF MANAGEMENT SKILLS**  
**ON ENTREPRENEURSHIP SUCCESS**

## METHOD

### The Context

As India is celebrating the silver jubilee of its deregulation, there has been an emphasis on higher education sector as it is the key driver to the future success of the industry. On 16<sup>th</sup> January 2016, the prime minister of India, launched the Start-up India movement unveiling fourteen action plans for encouraging Start-ups (Start-up plan in India). One of the action plans relate to setting up business incubators. This initiative has given boost to Business schools for augmenting their engagement in supporting entrepreneurship through their core teaching-learning, student-development and outreach activities.

### Sample and Data Collection

The target population comprise of the MBA graduates in the last five years who have taken up entrepreneurship. Stratified sampling of MBA graduates representing all sectors where graduates are running their entrepreneurial ventures was used to ensure representativeness (Wiersma & Jurs, 2004). A pilot study was conducted, confirming the clarity, relevance and validity of the questionnaire developed for the research. Participation was voluntary and confidential. An electronic version of the questionnaire was created using Google Forms and sent

to the respondents over Google Drive to 582 graduates. After systematically screening missing data, 432 questionnaires were recorded for analysis.

The data were analyzed using SPSS for their validity and reliability and were then tested via factor analysis and reliability tests to identify various dimensions, as measured by different dimensions such as personal skills, inter personal skills, group skills and entrepreneurship success. The study examines antecedents and the influence on entrepreneurship success of the three sets of management skills acquired as outcomes of management education. For alumni studies, the self-reported approach is commonly used, despite possibility of common method bias (Spector, 2006).

## MEASURES

### Management skills

Items for assessing management skills in three types and ten dimensions were developed after examining the literature covered in the earlier section in the paper. A pool of 84 questions was used after pilot testing. Management skill was measured separately for each type through respective dimensions.

Personal skills-Twenty-three items developed by Whetten and Cameron (Whetten & Cameron, 2011) were customized and used to assess personal skills covering, a) solving problems analytically and creatively, b) managing stress; and c) developing self-awareness. The Coefficient alpha for this measure was 0.79.

Interpersonal skills-Thirty-five items developed by Whetten and Cameron (Whetten & Cameron, 2011) were customized and used to assess interpersonal skills covering supportive communication; gaining power and influence; motivating others; and managing conflict. The Coefficient alpha for this measure was 0.81.

Group skills-Twenty-six items developed by Whetten and Cameron (Whetten & Cameron, 2011) were customized and used to assess skills covering, a) leading positive change, b) building effective teams and teamwork and c) empowering and delegating. The Coefficient alpha for this measure was 0.79.

### Entrepreneurship Success

The OECD/EUROSTAT framework for entrepreneurship indicators is used to assess entrepreneurial success. The framework captures six determinants, a) regulatory framework, b) R&D and technology, c) entrepreneurial capability, d) culture, e) access to finance and market conditions (Ahmad & Hoffman, 2007). The International Consortium for Entrepreneurship (ICE) collects and evaluates the quality of the available entrepreneurship each year. The quality assessment of indicators is based on a simple quality framework that draws on the experiences of the OECD, Eurostat and the US Key Indicator (Hoffmann, Larsen & Oxholm, 2006). The quality framework has three dimensions: relevance, accuracy and availability. Each indicator is evaluated by grading it for each dimension and by an overall assessment.

### Validation of the Scales

Factor analyses and reliability analyses were conducted to validate the scales for management skills. Exploratory factor analysis on the personal skills construct yielded four



dimensions on the personal skills; five dimensions on interpersonal skills and five dimensions on group skills.

**Table 1**  
**FACTOR LOADINGS OF PERSONAL SKILLS CONSTRUCT**

Item	Factor Loading	Cronbach Alpha	Eigen Values	Cumulative Variance %
<b>Factor 1. Self-awareness</b>				
• Seeking information about strength and weakness	0.820	0.882	17.70	28.08
• Willingness for self-disclosure	0.820			
• Awareness about style of decision making	0.862			
• Coping up with uncertain & ambiguous situations	0.780			
• Standards and principles to guide behaviour	0.841			
<b>Factor 2. Managing stress</b>				
• Time management	0.817	0.789	1.97	55.96
• Priority based task preference	0.764			
• Regular exercise for fitness	0.847			
• Maintaining open and trusting relationships	0.766			
• Practicing temporary relaxation techniques	0.867			
• Work-life balance	0.766			
<b>Factor 3. Solving problem analytically</b>				
• Problem definition	0.627	0.802	1.65	79.84
• Generating alternatives and not obvious solution,	0.667			
• Step wise approach to problem solving	0.687			
• Multiple perspectives in problem definition	0.821			
• Unfreezing thinking on problems by questioning	0.864			
• Thinking about problem both on logic and intuition	0.811			
• Develop sufficiently large alternatives	0.863			
• Using specific techniques to develop logical solutions	0.841			
<b>Factor 4. Solving problems creatively</b>				
• Encourage divergence in solving complex problem	0.766	0.814	1.01	97.11
• Acquire information outside problem solving group	0.781			
• Recognise sources and supports of decision making ideas	0.794			
• Walk away from rules to infuse creativity	0.771			

**Table 2**  
**FACTOR LOADINGS OF INTERPERSONAL SKILLS CONSTRUCT**

Item	Factor Loading	Cronbach Alpha	Eigen Values	Cumulative Variance %
<b>Factor 1. Supportive communication</b>				
• Helping others to recognise problem when counselling	0.758	0.798	24.98	25.89
• Contextual clarity on coaching and counselling	0.826			
• Strengthening relation -modifying behaviour	0.784			
• Descriptive while giving feedback	0.816			
• Taking personal responsibility on statements made	0.772			
• Identify area(s) of agreement, in situations of different view points	0.826			
• Do not talk-down-people with less power/ information	0.765			
• Respond to problem with understanding rather than advice	0.776			
• Effort and initiative exceed expectations	0.812			
<b>Factor 2. Gaining power and influence</b>				
• Continuous up-gradation of knowledge and skills.	0.789	0.802	3.19	50.89
• Supporting organizational ceremonies, events & activities	0.837			
• Broad network of relationships across organizational levels	0.812			
• Minimize routine tasks, generate new ideas, & initiate new activities	0.787			
• Personal touch in passing information	0.804			
• Bargaining orientation in high-pressure tactics situations	0.767			
• Improving will on others without using threat/being demanding	0.795			
• Determination of resources needed to support task performance.	0.817			
<b>Factor 3. Motivating others</b>				
• Using variety of reward for performance.	0.823	0.814	2.94	74.53
• Design tasks to make them interesting as well as challenging	0.794			
• Timely feedback from affected entities	0.819			
• Helping to establish challenging, time-bound & specific tasks	0.834			
• Reassign a poor performer-a last resort	0.766			
• Use discipline when efforts fall below capabilities	0.814			
• Ensure equity and fairness in dealings	0.805			
• Timely recognition for meaningful accomplishments.	0.774			
<b>Factor 4. Conflict management</b>				
• No personal acquisitions and self-serving motives	0.786	0.792	2.61	92.56
• Two-way interaction to facilitate expression of perspectives	0.823			
• Making specific request to gain more acceptable option	0.794			
• Showing genuine concern, even during disagreements	0.821			
• Seeking additional information from describing information	0.774			
• Seeking suggestion on behaviours that are more acceptable	0.812			
<b>Factor 5. Negotiation</b>				
• I do not take sides but remains neutral.	0.801	0.793	1.24	99.95
• I help the parties generate multiple alternatives.	0.763			
• I help the parties find areas on which they agree.	0.742			

**Table 3**  
**FACTOR LOADINGS OF GROUP SKILLS CONSTRUCT**

<b>Item</b>	<b>Factor Loading</b>	<b>Cronbach Alpha</b>	<b>Eigen Values</b>	<b>Cumulative Variance %</b>
<b>Factor 1. Empowering teammates</b>				
• Recognise and celebrate small success to make people feel to be competent	0.782	0.851	16.90	27.78
• Providing timely feedback and needed support	0.813			
• Provide needed information to accomplish tasks	0.782			
• Highlighting influence of a person's work	0.862			
<b>Factor 2. Delegating</b>				
• I specify clearly the results desired.	0.814	0.807	3.13	47.42
• I specify clearly the level of initiative wanted others to take	0.786			
• I allow participation by those accepting assignments regarding when and how work will be done.	0.828			
• I avoid upward delegation by asking people to recommend solutions, rather than merely asking for advice or answers, when a problem is encountered.	0.786			
• I follow up and maintain accountability for delegated tasks on a regular basis.	0.823			
<b>Factor 3. Building teams</b>				
• Knowledge about establishing credibility and influence	0.834	0.858	2.09	64.58
• Clarity and consistency on goals	0.781			
• Building common base of agreement before action	0.799			
• Articulation of vision and short-term goals	0.802			
<b>Factor 4. Leading change</b>				
• Knowledge about variety of ways to accomplish tasks in team	0.616	0.834	1.58	81.43
• Knowledge about variety of ways to build relationships and cohesion in team	0.686			
• Knowledge about different stages of team development	0.748			
• Enable expression of diverse opinions to avoid groupthink	0.823			
• Capitalize on core competencies of team members	0.748			
• Encouraging small continuous improvements as well as dramatic breakthrough	0.818			
<b>Factor 5. Facilitating team role</b>				
• Knowledge about unlocking people's positive energy	0.901	0.901	1.55	97.19
• I usually emphasize a higher purpose or meaning associated with the work I do.	0.891			
• I express gratitude frequently and conspicuously, even for small acts.	0.921			
• Keeping track of thing that go right as well as that go wrong	0.804			
• More of timely positive feedback	0.934			
• Communicating vision in ways that touch people's heart and heads	0.911			
• Knowledge about seeking commitment of people	0.901			

## RESULTS

Factor analysis was conducted (varimax rotation) for the items covering management skills. As can be seen in Table 1, Table 2 and Table 3, four factors in personal skills, five factors in interpersonal skills and five factors in group skills emerged. These were utilized for the correlation and regression analysis. Data analysis included correlation and regression. Table 4 presents mean, standard deviation and correlation among studied variables. All fourteen factors in management skills, covering personal skills, interpersonal skills and group skills are found to have significant correlation with entrepreneurship success. Regression analysis was conducted to predict the influence of personal, interpersonal and group skills on entrepreneurship success and presented in Table 5. As per the results, analytical problem solving, supportive communication, delegating and leading change do not influence entrepreneurship success. Among the other factors which significantly influence entrepreneurial success, the top three factors are, a) managing stress ( $\beta=0.133$ ,  $p<0.01$ ), b) creative problem solving ( $\beta=0.164$ ,  $p<0.01$ ) and c) power and influence ( $\beta=0.115$ ,  $p<0.01$ ).

**Table 4**  
**CORRELATION AMONG STUDIED VARIABLES**

	P1	P2	p3	p4	Int1	Int2	Int3	Int4	Int5	G1	G2	G3	G4	G5	Entrepreneurship Success
P1	1	0.443**	0.514**	0.432**	0.532**	0.418**	0.469**	0.510**	0.541**	0.521**	0.487**	0.579**	0.590**	0.506**	0.776**
P2		1	0.641**	0.510**	0.510**	0.543**	0.479**	0.417**	0.572**	0.508**	0.451**	0.464**	0.539**	0.508**	0.826**
P3			1	0.545**	0.565**	0.586**	0.520**	0.564**	0.494**	0.435**	0.435**	0.519**	0.484**	0.501**	0.862**
P4				1	0.523**	0.552**	0.476**	0.534**	0.574**	0.511**	0.506**	0.551**	0.527**	0.520**	0.796**
I1					1	0.452**	0.476**	0.434**	0.474**	0.511**	0.506**	0.551**	0.527**	0.520**	0.796**
I2						1	0.525**	0.469**	0.494**	0.470**	0.496**	0.548**	0.558**	0.444**	0.772**
I3							1	0.402**	0.560**	0.478**	0.437**	0.506**	0.523**	0.490**	0.790**
I4								1	0.460**	0.403**	0.448**	0.494**	0.471**	0.470**	0.734**
I5									1	0.454**	0.464**	0.480**	0.566**	0.465**	0.752**
G1										1	0.437**	0.500**	0.529**	0.416**	0.714**
G2											1	0.499**	0.453**	0.441**	0.720**
G3												1	0.562**	0.430**	0.744**
G4													1	0.531**	0.825**
G5														1	0.704**

Entrepreneurship Success															1
Mean	17.50	21.00	27.96	31.50	31.50	28.00	31.50	21.00	10.50	14.00	17.50	14.00	21.00	24.50	19.65
SD	8.54	10.25	13.03	15.37	15.37	13.67	15.38	10.25	5.12	6.83	8.54	6.83	9.50	11.96	8.09

\*p<.05, \*\*p<.01, \*\*\*p<.001.

Note: P1=Self-awareness, P2=Managing stress, P3=Creative problem solving, P4=Analytical problem solving, I1=Supportive communication, I2=Power and influence, I3=Motivating others, Int4=Conflict management, I5=Negotiation, G1=Empowering teammates, G2=Delegating, G3=Building team, G4=Leading change, G5=Facilitating team role.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R	R Square	Adjusted R Square	St. Error of the estimate
	B	Std. Error	Beta						
1 (Constant)	0.022	0.077		0.284	0.776	0.940	0.884	0.880	0.57368
P1	0.090	0.026	0.093	3.482	0.001				
P2	0.133	0.029	0.137	4.555	0.000				
P3	0.164	0.032	0.164	5.165	0.000				
P4	0.064	0.031	0.066	2.049	0.041				
I1	0.030	0.029	0.031	1.042	0.298				
I2	0.115	0.025	0.119	4.574	0.000				
I3	0.085	0.028	0.088	3.086	0.002				
I4	0.076	0.024	0.079	3.184	0.002				
I5	0.068	0.025	0.071	2.685	0.008				
G1	0.076	0.023	0.078	3.275	0.001				
G2	0.048	0.024	0.050	2.018	0.044				
G3	0.092	0.031	0.088	2.929	0.004				
G4	-0.001	0.027	-0.001	-0.028	0.978				
G5	0.079	0.023	0.082	3.410	0.001				

Dependent Variable: ES.

## DISCUSSION

The study examined the influence of personal skills, interpersonal skills and group skills acquired in the process of management education on entrepreneurship success. Understanding whether higher education in business administration is relevant for entrepreneurship proves to be an important question. Young graduates from both technical disciplines and science and humanities are attracted to MBA programmes with questionable effectiveness. Hypothesis 1- Personal skills gained via business management education lead to entrepreneurship success, is accepted, as all the four factors have been associated with correlation coefficient between 0.776 and 0.862. The correlation coefficient for self-awareness, managing stress, creative problem solving and analytical problem solving have been 0.776, 0.826, 0.862 and 0.796 respectively with  $p < 0.01$ . Self-awareness ( $\beta = 0.090$ ,  $p < 0.01$ ), managing stress ( $\beta = 0.133$ ,  $p < 0.01$ ) and creative problem solving ( $\beta = 0.164$ ,  $p < 0.01$ ) were found to be significant predictors of entrepreneurship success.

Hypothesis 2-Inter personal skills gained via business management education lead to entrepreneurship success, is accepted, as all five factors have been associated with correlation coefficient between 0.734 and 0.790. The correlation coefficients for Supportive communication, Power and influence, Motivating others, Conflict management and Negotiation are 0.796, 0.772, 0.790, 0.734 and 0.752 respectively with  $p < 0.01$ . From the regression analysis, power and influence ( $\beta = 0.115$ ,  $p < 0.01$ ), motivating others ( $\beta = 0.085$ ,  $p < 0.01$ ), conflict management ( $\beta = 0.076$ ,  $p < 0.01$ ), negotiation ( $\beta = 0.068$ ,  $p < 0.01$ ) were found to be significant predictors of entrepreneurship success.

Hypothesis 3-Group skills gained via business management education lead to entrepreneurship success is accepted, as all five factors have been associated with correlation coefficient between 0.704 and 0.825. The correlation coefficients for Empowering teammates, Delegating, Building team, Leading change and Facilitating team role are 0.714, 0.720, 0.744, 0.825 and 0.704 respectively at  $p < 0.01$ . As per the regression analysis, empowering teammates ( $\beta = 0.076$ ,  $p < 0.01$ ), building team ( $\beta = 0.092$ ,  $p < 0.01$ ) and facilitating team role ( $\beta = 0.079$ ,  $p < 0.05$ ) were found to be significant predictors of entrepreneurship success.

While the relative advantages of MBA education in universities/institutes with varying degree of rankings is not compared, stronger advantages of pursuing a MBA programme to succeed in entrepreneurship is identified. These findings are relevant for graduates who wish to invest two valuable years of their lives and substantial money for their own development in a MBA programme. The findings are also relevant for investors wishing to support business incubation centers in universities and business schools. The findings reflect and strengthen both managerial and scholarly understanding of the relevance and influence of formal management education in setting entrepreneurial ecosystem.

### **Theoretical Implications**

The study contributes to the knowledge base related to entrepreneurship and formal management education in several ways. Firstly, the relationship between entrepreneurship success and management skills provides support to the human capital theory (Becker, 1965) and contemporary entrepreneurship frameworks (Miller, 2012). Secondly, with growing complexity and dynamism in the business environment, the significance of management skills for entrepreneurship success provides support to the contemporary framework on habits of highly effective people (Covey, 1989). Thirdly the reflections of the dimensions of management skills provide support to the theory concerning human skills, which is placed at the core of effective social relations despite large scale changes in the technologies and socio-economic environment of business (Whetten & Cameron, 2011)

### **Limitations and Future Scope of the Research**

One limitation of the study is that variables were measured via self-reports, creating a potential problem of partial common-method bias. A longitudinal study could help in gaining deeper insights into the dynamics of entrepreneurial success and management skills. The measures used have been based on research in the global context. There is opportunity to contextualize better, some of the measures based on emerging trends in the entrepreneurship arena in India. There can also be opportunity to introduce control variables based on the changes in legislation on start-ups in India recently by the government, as a part of the start-up India movement.

## CONCLUSION

The study provides meaningful insights into the issues concerning the debate about worth of formal management education through the MBA programs in India. In particular, it offers evidence of value for individuals and organizations via the acquisition of human capital and its entrepreneurship outcomes. From the academic perspective, the study contributes to the human capital theory (for example, the influence of management education) and to contemporary entrepreneurship theory (for example, entrepreneurship success). From the practitioners' perspective (entrepreneurs and policy makers), it evaluates and reinforces the value of MBA education quite clearly. From the investors' perspective, it signals towards greater return in their investment. For educators (institutes/business schools/universities) it identifies areas of MBA influence, areas of improvement and factors for entrepreneurship success.

The empirical results presented in Table 4 and Table 5 indicates support for the three hypotheses presented in Figure 1. The results are useful for three key constituencies, a) for individuals, in making decisions about value of MBA education, b) for business schools to better develop teaching-learning, student development and outreach activities and c) policy makers and investors to align their strategies via supporting management education.

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