

Skill development through small business institute consultations: An exploratory empirical investigation

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ABSTRACT

Students graduating from institutions of higher learning need to be ready to tackle situations in creative thinking, problem solving, communication and leadership. Colleges and universities can use their Small Business Institute (SBI) consulting projects to help their students develop and sharpen such skills.

Students were surveyed to measure the skills and knowledge acquired from these projects. The analysis generated four distinct factor groups: Analytical Skills, Interpersonal Skills, Operational/Entrepreneurial Skills, and Career Usefulness. The findings reinforced the value and usefulness of classes such as Small Business Counseling in providing students opportunities to exercise their decision-making and analytical abilities.

INTRODUCTION

As the business world gets more and more competitive, the higher education institutions of business learning have come under a great deal of pressure to prepare their students to face the business world properly armed with knowledge and skills in problem solving, creative thinking, communication, and leadership. The inadequacies of college graduates may be attributed to the nature of most business curricula, which sometimes lack practical training time built in for students to acquire actual business problem-solving experience. Solving real business problems in classroom situations can develop and sharpen a number of entrepreneurial and managerial skills. A Likert-type scale was used to measure skill development through the Small Business Institute (SBI) class projects. This exploratory study set forth hypotheses on the benefits of SBI class projects as perceived by students who have participated in such SBI consulting projects and empirically verify these hypotheses.

ENTREPRENEURIAL AND MANAGERIAL SKILLS

According to researchers, entrepreneurship is the process of bringing together creative and innovative ideas and actions with the management and organizational skills necessary to mobilize the appropriate people, money, and operating resources to meet an identifiable need and create wealth in the process. Entrepreneurship requires a high level strategic combination of creativity, innovation, management skills and business knowledge (Timmons, Smallen & Dinger, 1985). An entrepreneur is not only a manager, but also a leader, catalyst, promoter, and nurturer of a business or an organization. Certain major identifiable characteristics of entrepreneurs are risk bearing, drive, energy level, need to control, ambition, need to achieve, need for power and need and desire for responsibility (Carland, Hoy & Carland, 1984). Novella Ross, an entrepreneurship educator from Ohio State University, defines entrepreneurship as "understanding the nature of small business, determining one's potential as an entrepreneur, and acquiring the competencies in marketing, sales, finance, recordkeeping, managing, and protecting a small business (Leaming & Salazar, 1986).

Managerial skills have been grouped into many categories by various researchers and authors (Pearce & Robinson, 1989; Carland et al., 1984; Chung and Megginson, 1981). For research purposes, in this study, managerial decision making skills are classified into three basic categories: interpersonal, technical, and conceptual skills. Interpersonal skills may be classified as those skills that allow a manager to communicate his/her ideas to others, and the ability to deal with individuals at different levels, within and outside the organization, in accomplishing the various goals and objectives. Technical skills may be classified as those skills that allow the manager to perform his/her tasks using the analytical and critical thinking abilities in the various functional areas of business that have been developed over time in solving problems. Conceptual skills may be defined as those skills that allow a manager to visualize his/her task from a macro perspective and understand the importance of the various parts of the organization functioning together in the achievement of common goals of the organization.

Employers want individuals who are not only well trained technically, but who also have development potential in entrepreneurial and managerial skills (Laser, 1980). The demand by employers is for individuals with skills in leadership, problem-solving, oral and written communication, along with attitudes of motivation and assertiveness (Lantos & Butaney, 1985). Classroom projects and internships can pave tremendous inroads in developing analytical and problem solving skills in students about to enter the job market (Harmon, 1988; Napier & Johnston, 1988; Wensley, 1983).

The Small Business Institutes around the country play a large part in these skill development efforts in college graduates. The SBI classes being offered in institutions of higher learning can and are becoming very useful pedagogical tools for developing analytical, problem solving, interpersonal and communication skills, and allow students to incorporate their theoretical and conceptual abilities into practical business problem solving situations (Ater & Coulter, 1980).

Academicians and SBI program administrators generally agree that the SBI classroom projects provide the students with experiences in problem solving and critical thinking, build assertiveness and confidence and, overall, provide them better career orientation. These projects also provide students the opportunities to interact with peers, clients, program administrators, and various other members of the business community on a professional level.

Thus, several hypotheses were developed regarding student perceptions and the SBI consultation projects based on the literature review. These hypotheses are:

- 1: After completing the SBI consultation project, students will perceive the experience as one that enhanced their analytical problem solving abilities.
- 2: After completing the SBI consultation project, students will be able to deal with business clients and colleagues on a more professional level.
- 3: After completing the SBI consultation project, students will benefit in preparing for the job market and their work environment.
- 4: After completing the SBI consultation project, students will benefit in developing their entrepreneurial and business functional skills.
- 5: After completing the SBI consultation project, students of all majors will find the SBI class to be equally effective in developing skills useful in their jobs.

RESEARCH METHODOLOGY

Data Collection

A questionnaire was mailed to 150 business students who had completed the SBI class over the past 11 years, many of whom were currently employed in various capacities in the business world. This group constitutes *all* students who completed the SBI consultation classes over the past 11 years. The first wave of mailings generated 101 responses; a second mailing resulted in a total of 127 usable responses in all, thus providing a total response rate of 85% for the study. In addition to general demographic information regarding the respondents, the questionnaire consisted of three sections eliciting responses to the experience gained from the SBI class, the skills the SBI class enabled the students to develop, and the evaluation of the class itself.

Measurement

A scale developed by Fontenot, Hoffman, and Viswanathan was used to measure the students' perceptions of the skills and knowledge acquired in the SBI classes (1990). The measurement used a 5 point Likert type scale with 1 being "strongly agree" and 5 being "strongly disagree". The instrument was pretested using current SBI consultation students and evaluated by several SBI program administrators. Students were asked to respond to statements prefaced by "The SBI class project helped me develop skills/knowledge in this area." The original scale resulted in the generation of four factors: Analytical Skills, Interpersonal Skills, Operational/Entrepreneurial Skills, and Career Usefulness.

ANALYSIS OF THE RESULTS

Factor analysis, with varimax rotation, was performed on the entire sample across the 20 items on the scale to assess the underlying dimensions of this scale. Factors with an eigenvalue of one or greater and a 0.50 factor loading were retained.

Four factors emerged in the analysis. The items loading on each factor are shown in Table 1.

Table 1. Factors and Loadings

ANALYTICAL SKILLS	FACTOR LOADINGS
How to analyze the competitive situation of the client under study	.708
How to recognize and identify problem situations in a small business	.685
How to search for relevant information from within and outside the small business	.677
How to conduct situation analysis of the small business under study	.629
How to analyze the industry of the small business under study	.618
How to identify the root of the problem as opposed to the symptoms of the problem	.530
INTERPERSONAL SKILLS	
How to relate with individuals in the business world	.784
How to interact with client personnel	.772
How to develop good rapport with the client	.716
How to deal with colleagues in the work place	.631
CAREER USEFULNESS	
I feel the SBI class should be made a requirement for all business majors.	.782
I use many of the skills I acquired from the SBI class on my current job.	.691
This class has helped me develop a better understanding of my work environment.	.652
This class helped me better prepare myself for the job market.	.639
I found the SBI project to be extremely useful.	.617
I will definitely recommend the SBI class to other students.	.615
ENTREPRENEURIAL SKILLS	
The personality traits that may be necessary to run a small business	.752
The management skills necessary to run a small business	.743
The marketing skills necessary to run a small business	.718
The entrepreneurial skills needed to run a small business	.686

The results of the factor analysis suggested using the 20 items to measure four dimensions of student perceptions of the SBI course. The factors generated were the same as those of the original scale development study. The group means for the four factors are shown in Table 2.

Hypothesis Tests

The finding of these four factors provided the opportunity to test the effectiveness of the SBI program in developing Analytical Skills, Interpersonal Skills, Operational/Entrepreneurial

Skills, and Career Usefulness. Based on the literature review and interviews with SBI alumni, the authors hypothesized that the SBI course significantly enhances the three skills areas and is useful in the alumni's careers.

Table 2. Group Means for the Four Factors

	Analytical Skills	Interpersonal Skills	Career Usefulness	Entrepreneurial Skills
Accounting	2.017	1.775	2.158	2.075
Computer Information Systems	2.028	1.958	2.694	2.542
Finance	2.175	2.025	2.417	2.350
General Business	2.083	2.125	1.500	2.000
Management	1.896	1.631	1.975	1.881
Marketing	2.109	2.058	2.147	2.346
Total	2.025	1.849	2.154	2.140

In testing the hypotheses, a mean less than 3.00 indicates that the respondent believes the SBI class project was effective in developing that specific area.

ANALYSIS OF DATA

Hypotheses I through IV indicate a direction; therefore, a one-tailed z test with the population standard deviation unknown was used to test the hypotheses. A .05 level of significance was used. Z scores and levels of significance are shown in Table 3. Hypothesis V was tested using MANOVA. A MANOVA was appropriate rather than separate ANOVAs, in order to preserve the alpha level (Hair, Anderson & Tatham, 1987).

Table 3. Z - Tests

Hypothesis	Factor	z-score	p-value
I	Analytical Skills	10.98	.0001
II	Interpersonal Skills	17.38	.0001
III	Entrepreneurial Skills	10.875	.0001
IV	Career Usefulness	10.875	.0001

Univariate F tests were conducted to assess whether the group means differed on each of the four scales which evolved through the factor analysis. The results of this analysis are presented in Table 4.

Hypothesis I

H_a : The alumni's rating of the SBI's effectiveness in the development of analytical skills is less than neutral (3.00).

The mean score on Factor 1, Analytical Skills, was 2.025. The null hypothesis was rejected ($z = 10.98$, $p = .0001$). This indicates that students perceived that their analytical skills were enhanced by the SBI consultation project.

Hypothesis II

H_a : The alumni's rating of the SBI's effectiveness in development of their interpersonal skills is less than neutral (3.00).

The sample mean score on Factor 2, Interpersonal Skills, was 1.849. The null hypothesis was rejected ($z = 17.38$, $p = .0001$), indicating that interpersonal skills were perceived to be developed in the SBI consultation project.

Hypothesis III

H_a : The alumni's rating of the SBI's later usefulness to their careers is less than neutral (3.00).

Hypothesis III was rejected ($z = 10.875$, $p = .0001$). The Career Usefulness factor mean score was 2.14, indicating that students found the SBI consultation experiences to be useful to them on their jobs.

Hypothesis IV

H_a : The alumni's rating of the SBI's effectiveness in development of their entrepreneurial skills is less than neutral (3.00).

On Factor 4, Entrepreneurial Skills, the mean score was 2.140. This hypothesis was rejected ($z = 17.38$, $p = .0001$). Students indicated that these skills had been developed while working on the SBI consultation project.

Hypothesis V

H_a : The four factor means of all majors are not equal.

The null hypothesis was not rejected. MANOVA was utilized to test Hypothesis V. The MANOVA resulted in an F-value of .17632 and a p-value of .571 which shows equality of variance in the six groups over all the four factors. This indicates that the six groups do not differ significantly, overall, in their perceptions of the usefulness of the SBI classes and of the skills learned in the SBI consultation projects.

The analysis indicates that with an alpha level of 0.05, group means are statistically equal on the Analytical Skills, Interpersonal Skills, Career Usefulness Skills, and Entrepreneurial Skills. The results suggest that the learning experiences obtained through the SBI classes are similar for all students regardless of their major areas of study. Consequently, the hypotheses regarding the types of skills developed in the SBI consultation projects were upheld.

Table 4. Univariate F-Tests

	F-Value	Significance Level
Analytical Skills	.83065	.531
Interpersonal Skills	1.65107	.153
Career Usefulness	1.58216	.171
Entrepreneurial Skills	2.06391	.075

SUMMARY OF RESULTS

Respondents indicated that the SBI consultation experience provided them with opportunities to learn how to distinguish between symptoms and problems and how to conduct industry, competitive, and situational analyses, which aided them in problem recognition. These activities were viewed as an exercise which developed Analytical Skills.

Respondents indicated that the SBI consultation experiences also provided them with opportunities to relate to colleagues on the counseling teams as well as the individual clients and client personnel they dealt with. These interactions were classified as Interpersonal Skill development.

The respondents also indicated that the SBI consultation projects allowed them to appreciate the overall job environment and allowed them to use the various skills learned in these consultation projects and function well in the business world and their chosen careers. This dimension was classified as the Career Usefulness Dimension in the study. Regarding Entrepreneurial Skills development, the students indicated that they were exposed to entrepreneurial problem solving and decision making situations in management and marketing. Students also indicated that they were exposed to aspects of personality skills development in the successful operation of a small business.

The SBI consulting project appears to develop the same types of skills and to be equally as useful to students regardless of major. The skill development occurred regardless of the respondents' majors.

CONCLUSION

The findings of the study suggest that the SBI cases do provide the students with a good deal of understanding of the business world they are being readied to enter. Students, having completed a practicum in small business problem solving through their small business

consulting classes, perceive themselves as well equipped in the areas of analytical skills, interpersonal skills, and entrepreneurial skills. In addition, the students felt that these classes provided them with better career direction and a greater awareness of the business environment. Each of the hypotheses stated earlier in the study were confirmed through the analysis.

Future Research Directions

This research study should be expanded to include students from various SBI programs throughout the nation. The survey instrument should be modified to allow for testing and measurement of skill development in such areas as communication and presentation. This investigation should also be extended to measure the satisfaction levels, benefit levels, and the perceived degree of success of the consultation projects. In time, a Client Satisfaction Index may be developed using perceived satisfaction, benefits and success to assess the usefulness of the various SBI consulting projects.

Replications of this study at other institutions, and the study of the clients of the SBI at other institutions regarding their perceptions of the benefits to the various parties involved, will not only strengthen the findings of this study but also will open other opportunities to better prepare students to fare well in the business world once they complete their education.

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