

SMALL BUSINESS CONSULTING: A 10-REGION ANALYSIS OF SMALL BUSINESS INSTITUTE PROGRAMS, 1990*

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ABSTRACT

Small Business Institute programs have operated in the U.S. for almost two decades. This particular vehicle for small business consulting has been the focus of many studies. However, a comparative analysis of the programs of the 10 SBA geographical regions has yet to be undertaken. This study examines similarities and differences in the SBI programs in all 10 regions and at the same time provides a database upon which other hypotheses may be developed. The benefits anticipated from the results of the research may be used in public policy decisions and in evaluating contributions by SBIs to the private sector.

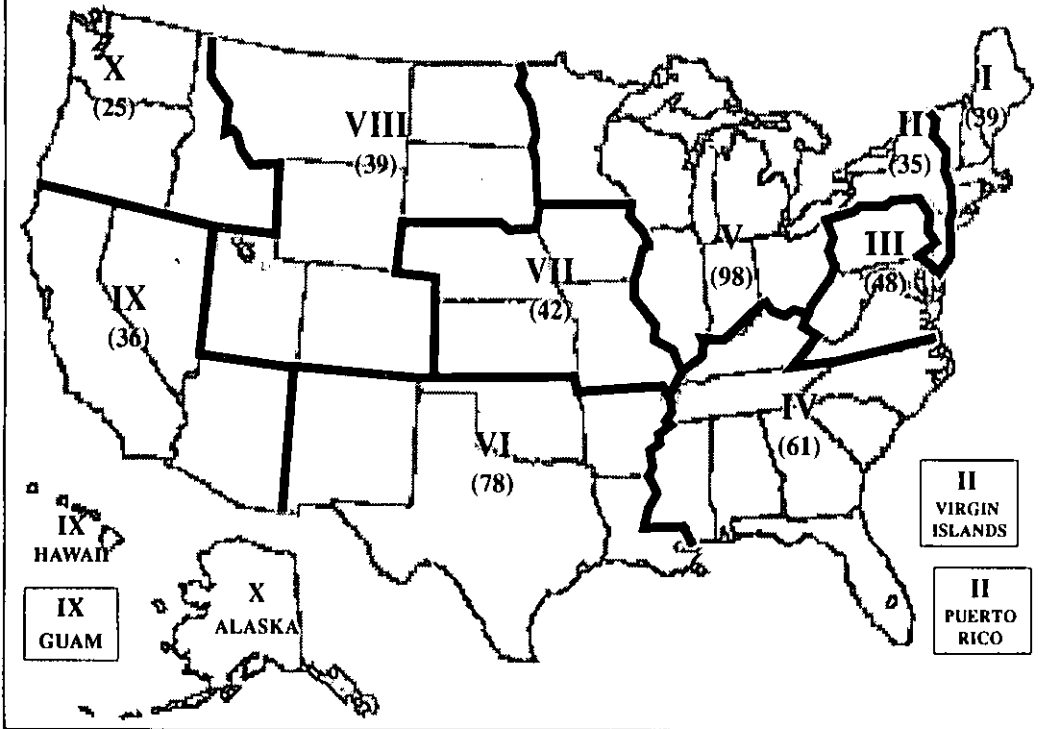
INTRODUCTION

In spite of many positive characteristics associated with small business activity in the U.S., the failure rate remains high. Typically, publications reporting on this situation, such as Dun and Bradstreet, express the reasons for small business failure in general terms such as "bad management" and categorize weaknesses as external and internal (Anderson & Dunkelberg, 1990; Kuratko & Hodgetts, 1989). External weaknesses included competition and those economic factors which normally have a significant impact. Moreover, researchers have determined that important internal factors, such as lack of business experience and the inability to handle operating aspects of the firm, had the greatest impact on the rate of small business failure (Bracker & Pearson, 1985; Solomon & Weaver, 1983; Sonfield, 1981; Ward, 1990).

In response to this economic reality, the Small Business Administration (SBA) has supported several management consulting programs. Such assistance is provided by the following organizations: (1) Service Corps of Retired Executives (SCORE); (2) Active Corps of Executives (ACE); (3) Small Business Development Centers (SBDC); and (4) Small Business Institute (SBI) programs. A number of studies which deal with planning, implementing, and evaluating these programs have been undertaken, and the results have been disseminated through journals and presentations at professional meetings (Bruckman & Imon, 1980; Franklin & Goodwin, 1983; Matthews, 1990; O'Conner & Rogers, 1988; Roitman, Emshoff, & Robinson, 1984).

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Figure 1. Small Business Institutes in the United States, 1990.



Compiled from the Small Business Institute Director's Association Membership Roster- 1989

This paper examines pertinent information which is characteristic of SBI programs in each of the 10 SBA regions. Such programs have been implemented through the cooperative efforts of colleges and universities with financial and technical support of the SBA. Typically, an SBI program consists of the director and a team of students who meet with a small businesses to discuss the client's problems. Each business requesting assistance is referred to as a case. The number of cases varies among the different universities and is dependent upon the expressed needs of the businesses within the community through a request for assistance. Next, the students analyze the client's situation and make recommendations designed to relieve or solve the concerns of the small businesses. The students' recommendations are presented to the client in an oral and written presentation with a copy of the report submitted to the appropriate SBA district office.

The Small Business Institute Director is normally a faculty member at the participating university and is responsible for the management and accountability of the SBI activities. At present, approximately 500 SBI programs operate from the campuses of colleges and universities within the U.S., including Guam, Puerto Rico, and the Virgin Islands. Figure 1 shows the geographic location of Region I through X and the number of SBI programs in each region. For instance, Region V has the largest number, 98 and 20%, of the active programs, while Region X, the northwestern region, has 25 programs and 5% of the total programs. The number of programs in each region appears to reflect, to some degree, the amount of commercial and industrial activity, population density, and participation and availability of colleges and universities in the area.

PURPOSE OF THE STUDY

SBI programs receive requests from a variety of businesses, and diverse problem areas arise during a school semester. Directors have reported counselling requests in the areas of marketing, finance, production, personnel, marketing research, and management. In addition, management assistance is requested for start-ups, location problems, legal difficulties, and international trade concerns (Joyce & Young, 1991; Young & Joyce 1991). SBI cases become increasingly extensive in that different industries receive SBI counselling. It is typical to provide client assistance to manufacturers, wholesalers, and retailers. The SBI program is provided to financial, professional, and service organizations as well as to the agricultural and mining industry.

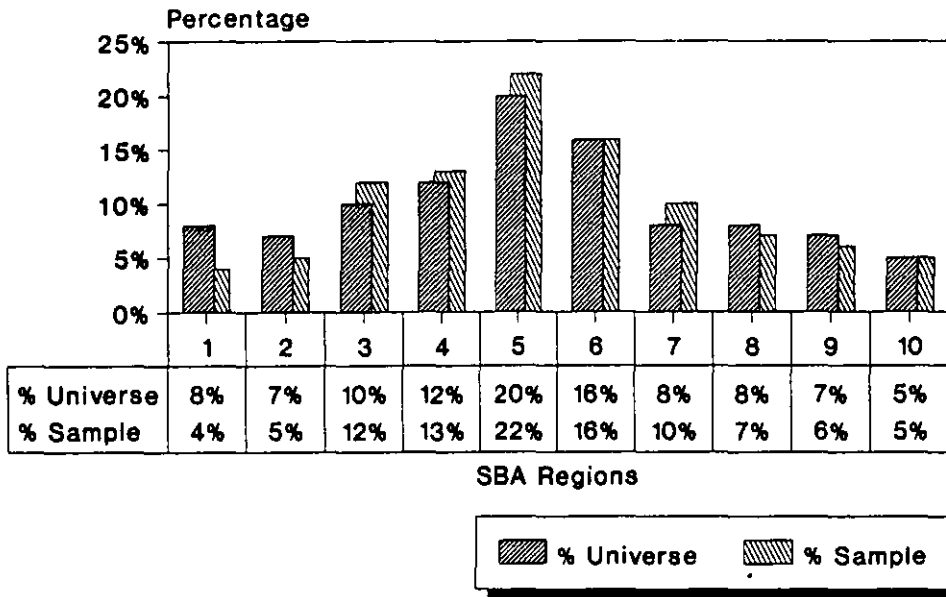
The major purpose of this study was to determine the current status of operating SBI programs in each region. Additionally, the study provided specific information regarding the differences and similarities of these programs in each of the ten SBA regions. Some of the research questions regarding each region were as follows:

1. Did the SBI programs have an SBDC nearby?
2. What percentage of SBI Directors had interaction with the Service Corps of Retired Executives (SCORE)?
3. What was the normal teaching assignment of directors, and what percentage of SBI directors received reduced assignments?
4. What was the median number of cases completed by region? What percentage of directors conducted more cases than funded by the SBA?
5. What percentage of directors had control over the SBI budget?
6. What was the background of directors by gender, highest academic degree, and length of time served as director?
7. What were the sizes of colleges and universities having SBI programs according to enrollment?

METHODOLOGY

The population consisted of 501 SBI directors located in the ten regions throughout the U.S. A four-page questionnaire was developed, pretested, and mailed with the cover letter requesting that the questionnaire be given to the appropriate SBI director in anticipation of normal leadership changes. The original mailing and follow-up resulted in 327 completed questionnaires (a response rate of 65%). This percentage, which was computed after the follow-up analysis, is somewhat larger than previous studies presented at professional meetings (Joyce & Young, 1991; Young & Joyce 1991). A wide cross section of SBI programs was included in the study. The percentage of SBI programs in the 10 regions and the percentage of sample respondents are shown in Figure 2. For instance, Region I, containing 8% of all 501 SBI programs, accounted for 4% of the total research sample (327).

Figure 2. Percentage of SBI programs by regions: (SBA universe and sample).



(Universe and Sample)
 The Universe has 501 SBI programs.
 The Sample has 327 SBI programs.

A description of each of the 10 regions, which allowed for a comparative analysis, was undertaken in order to provide a current data base to be used for entrepreneurial planning, educational development, and public policy decisions. Selective Chi-square (X^2) analyses were utilized to detect significant differences among the regions at the .05 level of significance. (Specific computations are shown as footnotes within the tables and figures).

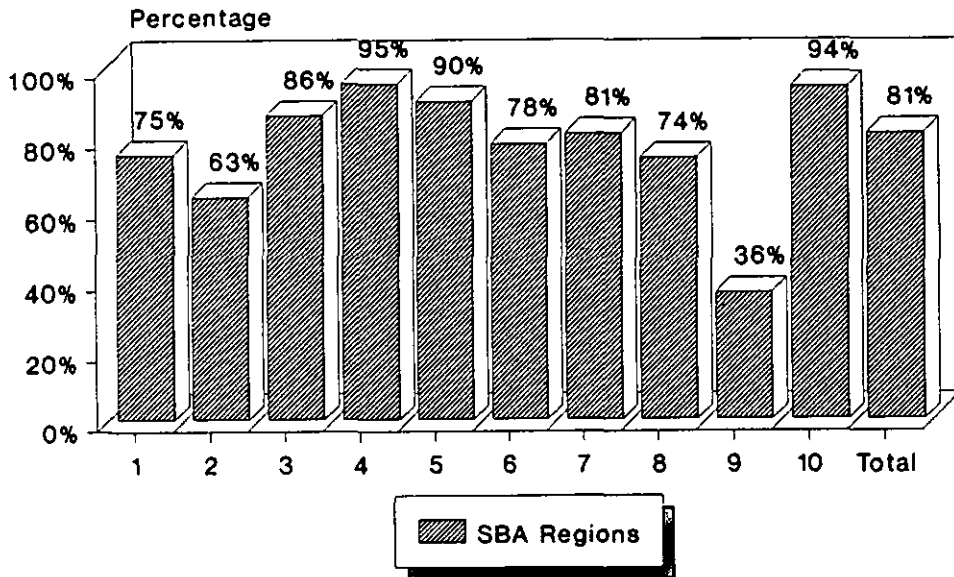
FINDINGS

The following findings contain pertinent descriptive information as well as national totals, obtained from the regions, while the accompanying tables and figures provide a regional comparison of similarities and differences.

Geographic Proximity of SBDC

Other SBA-sponsored management consulting appears to be widespread within the 10 regions since all regions contain SBDCs. When directors were asked if they had an SBDC in their community, Region IV and X directors reported having the greatest proportion, approximately 95%, as shown in Figure 3. However, only 36% of the directors from Region IX reported an SBDC nearby. A definite significant difference existed among the 10 regions with respect to their proximity to a SBDC.

Figure 3. Percentage of SBI's with small business development centers in close proximity by region.



$X(2) = 44.9$; d.f. = 9. Critical value = 16.
A significant difference exists.

Figure 4. Percentage of SBI directors who utilized SCORE by region.

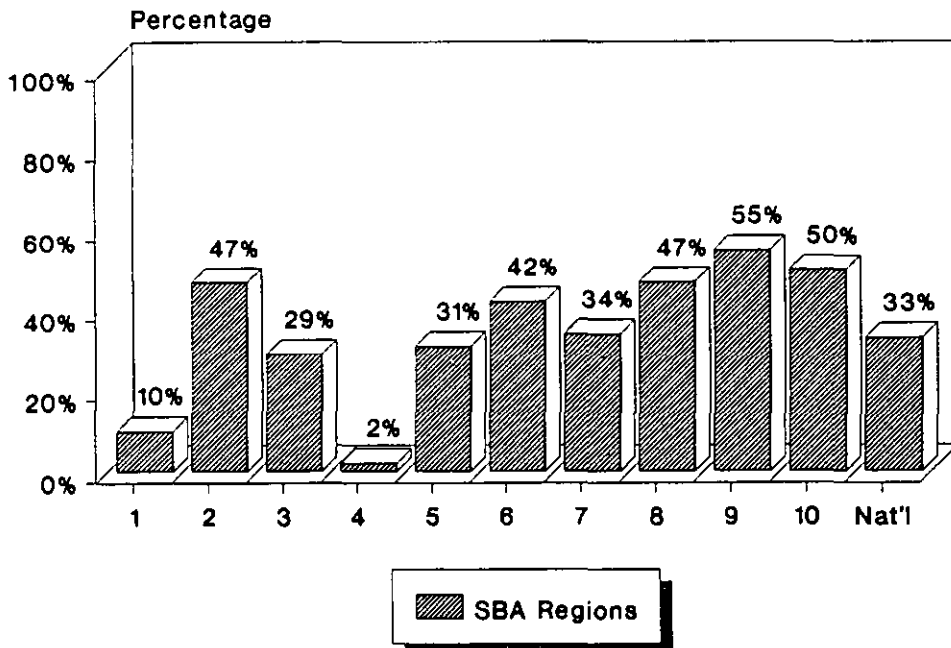


Table 1*Teaching Load of SBI Directors By Region*

Region	Semester Hours									
	Three		Six		Nine		Twelve		Fifteen	
	No.	%	No.	%	No.	%	No.	%	No.	%
1	0	0	3	4%	5	5%	4	4%	0	0%
2	1	5%	2	3%	6	6%	6	6%	1	33%
3	2	11%	9	12%	10	10%	12	12%	0	0%
4	5	26%	11	15%	11	11%	6	6%	0	0%
5	3	16%	16	22%	23	23%	18	19%	1	33%
6	2	11%	11	15%	16	16%	17	18%	1	33%
7	4	21%	8	11%	10	10%	9	9%	0	0%
8	0	0%	6	8%	4	4%	12	12%	0	0%
9	0	0%	4	5%	10	10%	8	8%	0	0%
10	2	11%	3	4%	5	5%	5	5%	0	0%
National Totals	19	6%	73	25%	100	34%	97	33%	3	1%

Note. The computed chi-square = 29.67; d.f. = 36.

No significant difference exists. Probability of chance of no difference = .75.

Management Assistance from SCORE

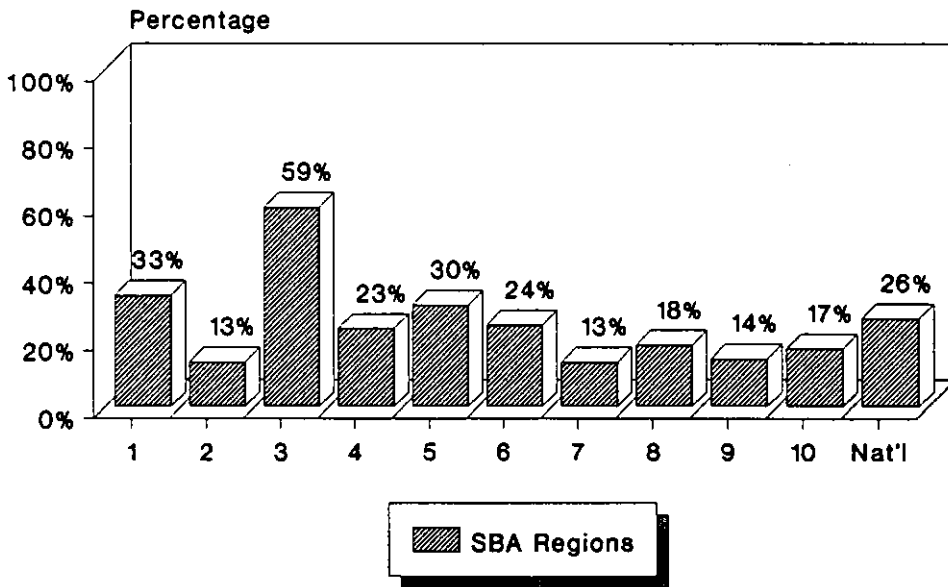
Of the 327 directors, 33% stated they utilized SCORE. The greatest interaction with SCORE came from Regions IX with 55% and Region X with 50%. Less SCORE utilization was reported by Regions I and IV, as shown in Figure 4. These data reflect the possibility that available human resources are not being utilized extensively in all regions and that perhaps an opportunity exists for an important cooperative effort.

Teaching Assignment

The majority of directors taught either 9 or 12 semester hours, as shown in Table 1. No significant difference existed among the regions as far as semester hours taught. However, only 6% of directors from all regions taught only 3 hours, while one-third taught 12 semester hours.

Some 26% of the total directors had reduced teaching assignments. Region III had more directors, 59%, with a reduced teaching assignment, as depicted by Figure 5. A significant difference existed among the regions when compared according to a reduced teaching assignment.

Figure 5. Percentage of SBI directors with reduced teaching assignments by region.



Computed chi-square = 26.9; d.f. = 9.
Critical value = 16.9.
A significant difference exists.

Completed Cases

SBI directors completed an average (median) of 12 cases per year. The median number of completed cases in the 10 regions ranged from 7 - 17. Regions IX, X, and VI completed the largest number of cases with medians of 17, 16, 15 respectively. The smallest median number of cases, 7 and 8, were completed by Regions I and III during the study period.

Nationally, 53% of the total directors reported they had conducted more cases than those funded by the SBA. Therefore, the total costs for the non-SBA funded cases were absorbed by the colleges or universities. It appears important that directors become aware of the economic and political implications of this situation. When analyzed by region, a range of 31% to 68% of the directors indicated they had conducted more cases than funded. Furthermore, directors who conducted fewer non-SBA funded cases were in Regions I, IV, VII, and X. A comparison of all regions is presented in Figure 7.

Figure 6. Median number of cases completed by region (academic year, 1989-1990).

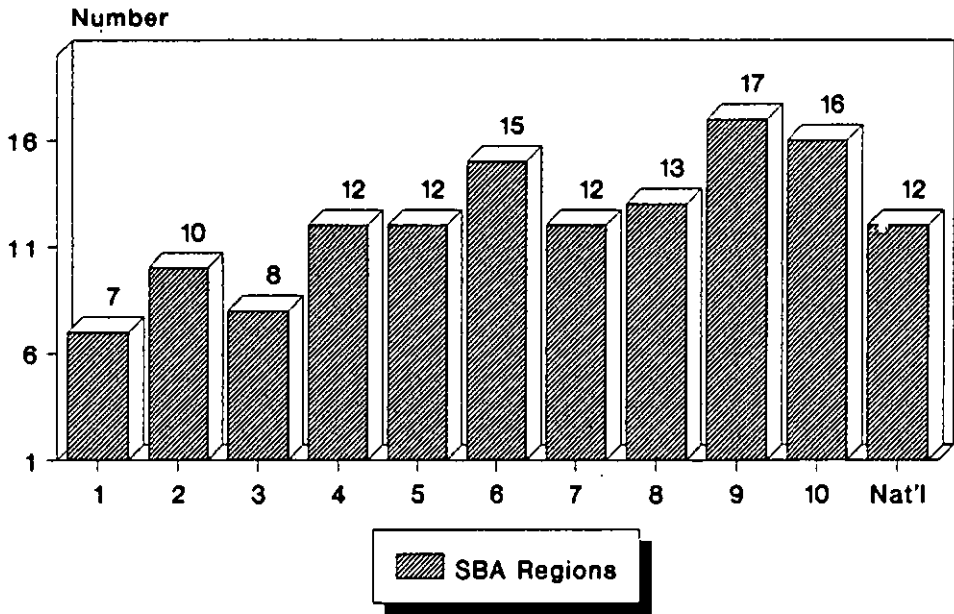
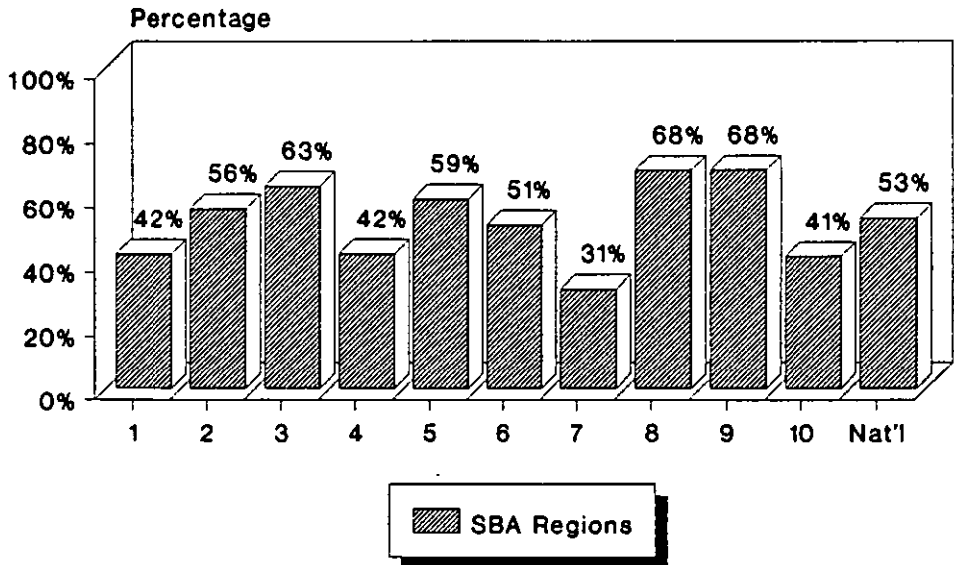
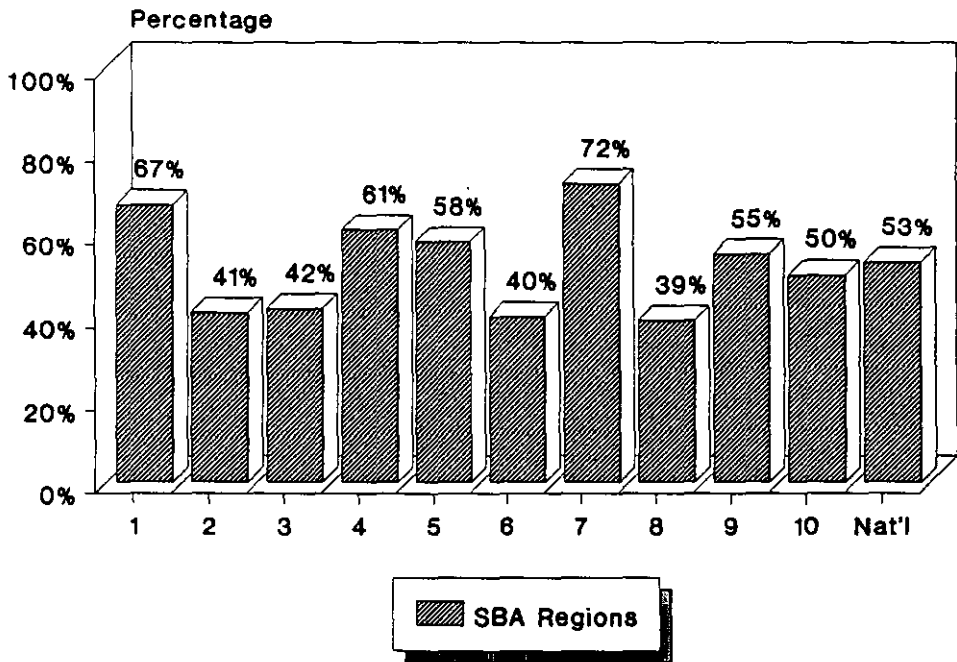


Figure 7. Percentage of SBI directors conducting non-SBA funded cases by region.



Chi square = 16.4; d.f. = 9
 Critical value = 16.9.
 No difference exists at .05 level.

Figure 8. Percentage of SBI directors with budgetary control by region.



Budgetary Control

Nationally, 53% of the total directors stated they have authority for the implementation of the SBI budget. Regionally, director control ranged from approximately 40% to 72%, as indicated in Figure 8. Regions VII, I, and IV had the largest percentage of directors with control over their budgets with 72%, 67%, and 61% respectively.

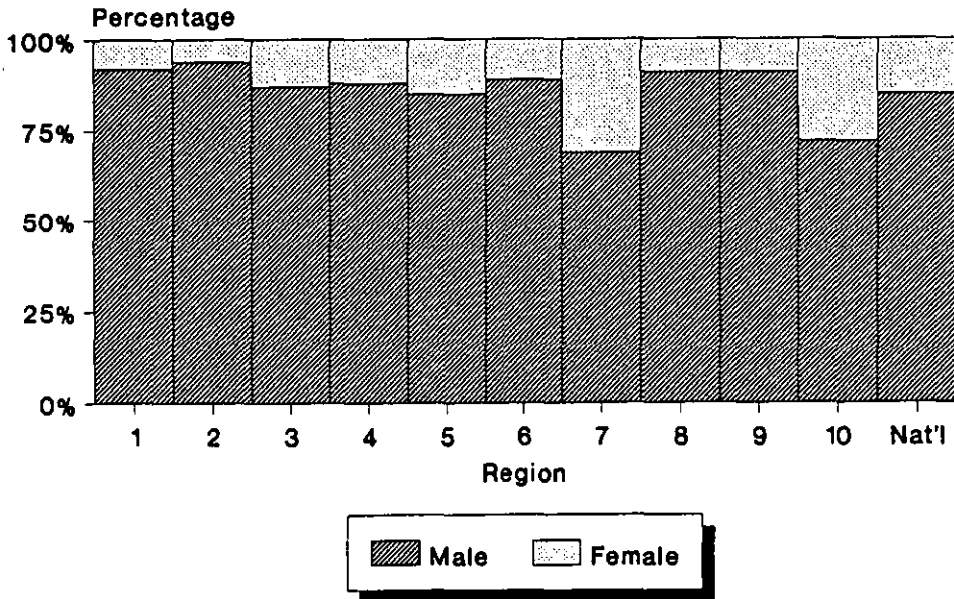
Background of SBI Directors

Gender. The majority (85%) of the responding SBI directors were male. The largest number of female directors were in Region VII and X with 31% and 28% respectively. Also, only 2% of the directors from Region II were female, representing the smallest percentage. However, no significant differences existed in the regions regarding gender of the director.

Academic Achievement. In response to a request about the highest completed degree, 57% of all reporting directors indicated that they had attained a doctoral degree. College and university administrations appeared willing to assign professionals of this quality to the growth and development of this entrepreneurial activity. In addition, it seems important that they are interested in providing service to the private sector of the economy.

Regions IX and X had the largest percentages of SBI directors (77%), whereas the smallest percentages were found in Regions II and VII (35% and 31% respectively). However, as shown in Table 2, the differences by region and highest degree held were not significant.

Figure 9. Gender of SBI directors by region.



Chi-square = 12.7; d.f. = 9.
 Critical value = 16.9.
 No difference exists.

Table 2

Level of Academic Achievement of SBI Directors by Region

Region	Advanced Degree					
	Bachelor's		Master's		Doctorate	
	No.	%	No.	%	No.	%
1	0	0%	3	25%	9	75%
2	1	6%	10	59%	6	35%
3	1	3%	16	42%	21	55%
4	1	2%	17	43%	22	55%
5	2	3%	27	37%	43	60%
6	2	4%	23	44%	27	52%
7	1	3%	21	66%	10	31%
8	0	0%	5	24%	16	76%
9	1	5%	4	18%	17	77%
10	0	0%	4	23%	13	77%
National Totals	9	3%	130	40%	184	57%

Note. Chi-square = 25.67; d.f. = 18. Critical value = 28.9. Therefore, no significant difference exists.

Table 3

Length of Service as SBI Director of Region

Region	Years			
	<1 Year	1-4	5-8	>8 Years
1	17%	33%	25%	25%
2	12%	41%	29%	18%
3	13%	38%	30%	19%
4	17%	29%	22%	32%
5	12%	31%	28%	29%
6	15%	31%	33%	21%
7	12%	38%	25%	25%
8	18%	18%	18%	46%
9	0%	23%	32%	45%
10	33%	39%	11%	17%
National Totals	14%	32%	27%	27%

Note. Chi-square = 24.5, d.f. = 27; Critical value = 40.1. Therefore, no significant difference exists.

Length of Service. When asked how many years the directors served, a wide range of answers were reported. Nationally, 27% of the directors had served over five years; another 27% had served over eight years. Table 3 illustrates that Regions VIII and Region IX had the largest percentages of directors (45%) who had served over eight years. No significant difference existed according to region and length of service by the SBI directors.

Size of Academic Institution

Table 4 provides a regional breakdown by region of the operating SBI programs by size of their college or university student enrollment. Some 62% of the programs were housed at institutions with enrollments of fewer than 10,000. Generally, the majority of SBI programs were in educational institutions with smaller enrollments (under 10,000) with the exception of Region IX, which had 64% of the directors in universities with student enrollment over 15,000. A chi-square value of 70.4 denotes a significant difference existed between the SBA regions and size of academic institution.

Table 4*Size of University by Region*

Region	Student Enrollment				
	< 4,999	5,000-9,999	10,000-14,000	15,000-19,999	> 20,000
1	58%	0%	17%	25%	0%
2	58%	6%	24%	12%	0%
3	45%	29%	16%	2%	8%
4	31%	27%	20%	7%	15%
5	39%	22%	10%	11%	18%
6	42%	23%	11%	12%	12%
7	44%	19%	15%	9%	13%
8	48%	13%	26%	0%	13%
9	14%	18%	4%	9%	55%
10	50%	17%	5%	28%	0%
National Totals	41%	21%	14%	10%	14%

Note. The computed chi-square = 70.4; d.f. = 36. Probability of change of no difference = .0003. A significant difference exists between the regions and size of the university.

SUMMARY

This study, covering 10 SBA regions in the U.S., was quite extensive. In addition to this current data base, information was gathered to compare and denote similarities and differences among the programs by region. The following summary indicates the existence or absence of significant differences as to program characteristics among the regions based on statistical analysis:

<u>Characteristic</u>	<u>Statistical Measurement</u>
Proximity of SBDC	Significant difference
Non-funded cases	No significant difference
Budgetary control	No significant difference
Teaching load	No significant difference
Reduced teaching assignment	Significant difference
Gender	No significant difference
Length of time served	No significant difference
Highest degree held	No significant difference
Size of university	Significant difference

Regardless of geographical location, a basic consistency of operation appeared to exist among the programs. Although a high degree of standardization may result, variations were also recognized within the profiles. For example, Regions IV and X had the greatest concentration of SBDCs in

close proximity to operating SBI programs. A significant difference also existed among the regions when the variable of reduced teaching load for SBI directors was measured. Approximately 60% of the directors in Region III have a reduced teaching load compared to 13% in Regions II and VI. In addition, differences were evident among the regions regarding size of institution housing SBI programs. Smaller universities with fewer than 5,000 students were represented by 41% of the programs, whereas larger universities with over 20,000 students were represented by only 14% of the programs.

Future research that includes a program evaluation of each region would seem worthwhile in order to examine national and regional differences. For instance, the realization that a region conducts fewer cases than the national average might cause concern among those affected. Moreover, future research might assess the underlying reasons for the differences among regions. For example, academic accounting policies could be responsible for the differences in budgetary control maintained by SBI directors, and the differences in size of academic institutions might be cross-classified by the number of cases completed. Since a database is now available on selected characteristics for each region, it is possible for regions to compare themselves with others. Where there are deviations, explanations may be found, and needed changes may be made to strengthen the SBI programs. Furthermore, the Small Business Administration could use the results of the study in implementing improvements on a national level, and it is quite likely that some public policy issues could be influenced by reliance upon this data. Colleges and universities could benefit from the results of the study regarding teaching loads of SBI directors as well as those dealing with the issues of budgetary authority and its proper control. In particular, the degree to which SBI programs and SBDCs coordinate their efforts should be important to the SBA regional offices.

Because of the high response rate (65%) inferences made at a national level may be undertaken with considerable confidence. This study yielded a current profile of the operating SBI programs, which should be useful in decision-making for both the public and private sector. Furthermore, these research findings reflect the current operational activities of the SBI programs. This database provides information for future research and for the development of hypotheses and their subsequent testing.

REFERENCES

- Anderson, R. L., & Dunkelberg, J. S. (1990). *Entrepreneurship: Starting a new business*. New York: Harper and Row.
- Bracker, J. S., & Pearson, J. N. (1985). The impact of consultants on small firm strategic planning. *Journal of Small Business Management*, 23, 23-30.
- Bruckman, J. C., & Imon, S. (1980). Consulting with small business: A process model. *Journal of Small Business Management*, 18, 41-47.
- Franklin, S.G., & Goodwin, J.S. (1983). Problems of small business and sources of assistance: A survey. *Journal of Small Business Management*, 21, 5-12.
- Joyce, G., & Young, M. (1991). A contemporary profile of Small Business Institute programs: A regional analysis. *Proceedings of the Annual Conference of the Southwestern Small Business Institute Association*. Houston, TX, 27-36.
- Kuratko, D. F., & Hodgetts, R. M. (1989). *Entrepreneurship: A Contemporary Approach*. Chicago: The Dryden Press.
- Matthews, C. H. (1990). Small business consultation: Issues for the SBI case experience. *Proceedings of Annual Conference of Small Business Institute Directors' Association*. Houston, TX, 55-60.

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- O'Conner, E., & Rogers, J. (1988). An examination of the attitudes of clients and students in the SBI case situations. *Proceedings of Annual Conference of Small Business Institute Directors' Association*. San Francisco, CA, 311-315.
- Roitman, D. B., Emshoff, J. C., & Robinson, R. B. (1984). College-based managerial and technical assistance for small business. *Journal of Small Business Management*, 22, 53-61.
- Solomon, G. T. & Weaver, K. M. (1983). Small Business Institute economic impact evaluation. *American Journal of Small Business*, 8, 41-51.
- Sonfield, M. C. (1981). Can student consultants really help a small business? *Journal of Small Business Management*, 19, 3-9.
- Ward, E. (1990). A measurement model of the economic impact of Small Business Institutes. *Journal of Small Business Strategy*, 1, 65-75.
- Young, M., & Joyce, G. (1991). Organizational structure and operational behavior of Small Business Institute programs. *Proceedings of the Annual Conference of Small Business Institute Directors' Association*. Orlando, FL, 343-353.