

PERCEPTIONS OF SHUDENT PARTICIPANTS TOWARD SMALL BUSINESS INSTITUTE PROGRAMS AT SELECTED INSTITUTIONS OF HIGHER EDUCATION IN TEXAS

DISSERTATION

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William S. Aston, B.S., M.B.A. Denton, Texas December, 1984

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This investigation examines the perceptions of students enrolled in Small Business Institute (SBI) courses at six collegiate schools of business toward various aspects of the SBI experience. A questionnaire, adapted from an earlier study, was assessed for content validity by appropriate authorities in the areas of the SBI, entrepreneurship, and business communications.

Two administrations of the questionnaire were given at an approximate three-month interval. The initial administration preceded all contacts between student consultants and clients. The second administration was given some three months later to essentially the same body of students following extensive contacts with clients. More than 75 per cent of the pre-test respondents also took the post test, thereby augmenting the validity of the Kolmogorov-Smirnov and Chi-square statistics employed in the study. Results of the study indicate the existence of significant inter-school differences among student perceptions toward the SBI experience, both prior and subsequent to the initiation of contacts with clients. On the other hand, there were no significant differences in pre- and post-administration response patterns within the schools.

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CHAPTER I

INTRODUCTION

Professional educators recently have begun to recognize values gained from students' learning experiences acquired in settings apart from the traditional classroom (8). Within prescribed boundaries, certain business educators now are incorporating into the academic curriculum selected field experiences of perceived merit. Colleges of education for decades have required baccalaureate candidates to fulfill a practice teaching internship as a requirement for graduation and teacher certification.

In the past decade, numerous collegiate schools of business also have begun to recognize educational merit gained in field experiences where the student applies what has been learned in the classroom. (11). One such vehicle is the Small Business Institute (SBI) program. The SBI is co-sponsored by the Small Business Administration (SBA) and participating schools of business. This program was created to involve business students and faculty in providing counsel to owners of small businesses. Anderson's (1) investigation suggests that the small business entity is a

likely recipient of managerial counsel in view of the high failure rate which confronts the small business sector.

Statement of the Problem

This study evaluated Small Business Institute programs at six Texas colleges in terms of student perceptions toward the SBI experience.

Purposes of the Study

The purposes of the study were

 To measure the perceptions of student participants toward the SBI experience; and

2. To make available to the Small Business Administration and to interested educators recommendations for possible programmatic changes.

Hypotheses

To carry out the intent of this study, the following hypotheses were tested:

 There will be no significant inter-school perceptual differences toward the SBI experience prior to the initiation of client contacts by the student participants.

2. There will be no significant inter-school perceptual differences toward the SBI experience subsequent to the initiation of client contacts by the student participants. 3. There will be no significant intra-school perceptual differences toward the SBI experience as measured by responses provided by students both prior and subsequent to the initiation of contacts with clients.

Background and Significance of the Study Numerous collegiate schools of business within the past decade have assumed increased instructional responsibility for more adequately meeting the needs of their constituencies (8). The value of laboratory-type training has long been acknowledged (27) by colleges of education, pioneers of on-the-job training for teacher candidates. Other components of the teaching profession later introduced non-classroom techniques in efforts to further the interests of other types of candidates, particularly those candidates whose interests and preparations had equipped them for vocational employment rather than professional employment.

Collegiate schools of business within recent years have begun to blend the academic, classroom experience with the field experience of the so-called "real world" in an effort to provide a more enriching, more nearly complete educational experience (8). A currently popular program of this type is the Small Business Institute. Under joint sponsorship of the Small Business Administration and participating schools of business, the SBI program focuses

upon college students who, under faculty sponsorship, provide counsel to owners of small businesses. The SBA underwrites a part of the program cost by paying a small fee to the business schools for the services provided by the student consultants. In turn, designated faculty personnel supervise upper level undergraduates and a limited number of graduate students. Finally, business operators volunteer for counseling by presenting their firms' problems for prospective resolution.

The sponsoring federal agency, the Small Business Administration, was created in 1953 by Congress to provide economic assistance and counsel to entrepreneurs which were unable to obtain financing from conventional sources. The SBA also works with other entities in behalf of the client borrower and, in the process, assists approximately 8,000 businesses each year (25).

The principal sum borrowed by the entrepreneur must be repaid in full, together with interest at a predetermined rate. The agency provides managerial expertise to the borrower in order to help foster conditions conducive to the accomplishment of positive organizational change. Additionally, having made a commitment of federal funds, the SBA has assumed a vested interest in helping to improve the firm being assisted. Serving as a joint undertaking between the SBA and the business school, the SBI program enables students to work under faculty direction with cases provided by the SBA. The goal of such an undertaking is to help small firms be more successful. Benefits of participating in the program flow bilaterally in that the firm receives managerial counseling and the student realizes a hands-on educational experience (11).

An organization must meet designated requirements (28) in order to qualify as a small business. The initial requirement states that the firm which receives an SBA loan must be independently owned and operated and not dominant in its field of operation. The SBA's Office of Advocacy reports that the SBA uses guideline cutoff figures for varying types of businesses with respect to number of employees, annual receipts, and net income. Other requirements relate to sales volume and the number of employees within the firm. The maximum number of employees that a firm may have and still be classified as small for purposes of obtaining an SBA loan is 1,500. That figure is applicable to a manufacturing facility. Annual gross receipts for a general construction operation may run as high as \$9.5 million. Farming and related activities are limited to gross receipts of \$275,000. Additional constraints are applied consistent with individual circumstances (25).

As of December 1981, the SBA operated 96 field offices throughout the United States and Guam. In order to meet public needs, the SBA attempts to maximize its in-house human resources as well as the services of volunteers. The latter group may include college students of business administration, the Service Corps of Retired Executives, and the Active Corps of Executives. Other national professional associations, including the American Association of Retired Persons, periodically assist the SBA. The agency endeavors to match needs with know-how. Specifically, the agency attempts to match needs of the troubled firm with the expertise of one or more volunteers. A needs evaluation is initiated when one or more assigned counselors visit the financially troubled organization. The on-site inspection consists of a methodical observation of operations. This may include an examination of books and records, an analysis of personnel staffing, a review of credit policy, and an inspection of the capital structure and organizational procedures.

A unique aspect of SBI instruction is that the small business course is one of the few educational vehicles in which all elements of business administration are drawn together. The shift from the traditional text stimuli to a blend of standard classroom activity coupled with case study has been more evolutionary than revolutionary. Inception of

this movement in the business school may be traced to the case-study approach pioneered in the early decades of this century at Harvard University (8). That early-day trend has proliferated to the extent of widespread use at a majority of the business schools holding memberships in the American Assembly of Collegiate Schools of Business, triggering a merger between the SBA and the business school.

As the university component of the SBA, the SBI provides human-resource assistance to identify problem areas besetting a firm. The SBI further evaluates varied alternatives for achieving desired change. From an array of options, the SBI strives to apply the single most feasible alternative. The problem may be instantly identifiable to the student consultant. On the other hand, the problem could be much less visible. A case of the latter type normally warrants a deeper probing by the student team (25).

Recommendations vary according to the problem confronting the firm. In order to contribute meaningfully as a consultant, a student must have satisfactorily completed the core business administration curriculum as well as a concentration in one or more specialty disciplines. The participating student also must be of upper-level or graduate standing.

The SBI program was created in 1971; today the program serves almost 500 campuses across the nation (21). In

addition to providing small businesses with more effective ways of dealing with their increasingly complex and varying tasks, this new trend in education and training is indicative of the renewed attention being focused upon the role that small business plays in the social and economic system today.

Despite growing acceptance of the Small Business Institute, management of the troubled firm may be reluctant to accept recommendations of the consulting team (12). The entrepreneur may have become so accustomed to a comfortable, yet unprofitable, pattern of operation that as to largely have become unconsciously insulated against change. The team may have been prepared for such a contingency and thus direct its counsel accordingly. In the final analysis, however, the business person determines the extent to accept the recommendations of the student consulting team.

Although the SBI program has gained an enthusiastic following, the SBA admits some of the firms it would like to assist have floundered for a prolonged period and are beyond the agency's help. Managerial incompetence, inflexibility, or limited financing may have persisted for too long to permit salvaging a marginal operation (15).

Neither the SBA nor the school charges a fee to the firm which receives SBI counseling. The SBA's Assistant Director in charge of Management Assistance for the Dallas

District, William Simms (35), volunteered the following data relative to cost and availability of SBI counseling: The SBA pays the participating business school \$250.00 for each case which the student team successfully prepares. Simms added that SBI counseling ordinarily is limited to SBA loan recipients and to small federally-contracted firms. If, however, a sufficient number of student counselors and agency funds are available, the SBI program may be made accessible to other businesses which perceive a need for SBI assistance.

Student enthusiasm for participating in SBI case work runs at a high level, observes Ross Flaherty (33), faculty sponsor of the SBI program at the University of Texas at Arlington (UTA). Flaherty asserted that the intensity of student interest enables him to screen carefully the candidates for the SBI course. Upon being selected for the program, Flaherty added, the students are grouped into teams. The group members then divide the counseling tasks into units of individual responsibility. Each member works on the assigned project, and the team then synthesizes the contribution of each member into a composite report. These activities typically last from twelve to fourteen weeks, Flaherty noted.

As a technique for fostering a keener level of interest among the team members, and consistent with the traditional

climate of business, the supervising professor may opt to establish a quasi-competitive atmosphere, observed Dean Lewis (34), the 1979-1980 SBI project director at East Texas State University at Commerce. In an interview at ETSU's Dallas Center, Lewis acknowledged that the creation of such an atmosphere could be accomplished in a variety of ways. One method is by requiring each group member to evaluate critically the contribution quality of each peer. The team is allocated a given number of points, and each member assigns the points among the participants on the basis of perceived contribution to the project. This plan rewards each participant in direct proportion to the value of the members's effort. In the interest of objectivity, the participant does not evaluate his own effort, Lewis concluded.

Another alternative intended to improve the quality of the firm's finished product is the encouragement of student competition through use of a peer-rating scale. In applying this technique, the supervising professor establishes a series of variables as criteria to assist each candidate in administering the peer evaluation. Each variable is assigned a prescribed weight, indicating its relative importance, and the composite value totals 100 per cent. The faculty sponsor may apply any additional constraints believed to be appropriate to optimize final product quality. For example, the professor might require each candidate to distinguish by a prescribed minimum number of points a level of difference in the contribution quality of each member. This tactic tends to minimize any proclivity among students for assigning artificially high ratings, Lewis asserted.

The SBI program has emerged because of the importance of small business in modern society and because of the high failure rate which this sector has experienced. SBA figures (25) indicate that 95 per cent of all profit-oriented concerns in the United States qualify as small businesses. Moreover, a majority of small firms fail within five years, Potts (22) reports. Even so, recent studies indicate that SBI counseling has proved useful. Specifically, Luchsinger (15) reports that a number of SBI-counseled entrepreneurs credit SBI assistance with dramatic turnarounds among formerly marginal operations. The researcher notes that a Denver pizza parlor recorded a 20 per cent increase in sales and a 10 per cent increase in net profits after the firm received SBI help. At the suggestion of the SBI team, several of the menu items were eliminated, thereby permitting the owners to specialize and raise prices on other items.

Another SBI-induced success story is reflected in the case of a Dallas manufacturing concern. The company's SBA

loan was past due when a student counseling team was assigned to work with the organization. After consultation, the team made one major recommendation, resulting in the removal of production bottlenecks, Solomon (26) reports. The SBI students charted the production line flow, thereby reducing labor costs and increasing production. Within three months, the company's financial status changed from loan delinquent to profit-making--rapidly approaching \$10,000 per month.

In personal interviews with five SBI faculty sponsors, numerous types of business problems surfaced. Clifford Donnally (32), professor of management and marketing at Texas Wesleyan College, noted the level of diversity associated with case work. Problems which had challenged his SBI students included determining the feasibility of physically expanding an existing operation, developing marketing strategies for a rodeo organization, and resolving various accounting problems, including the recommendation for increased stringency by organizational management in granting credit.

East Texas State University's Lewis shared some concerns which he holds for SBI student consultants. In an interview at ETSU's Dallas Center, Lewis confided his reluctance in permitting the use of SBI students as "hatchet men" or "scapegoats". Specifically, the faculty sponsor seeks to avoid an entrepreneur's manipulation of SBI students by using them to recommend firings of unwanted employees.

In evaluating business problems, UTA's Flaherty observed that some problems which were fairly apparent to the consulting teams had eluded owner/managers for extended periods. Flaherty's SBI students had worked with the owner of a photographic laboratory which was experiencing what the owner believed to be excessive personnel turnover. The attrition factor among employees particularly distressed the owner because of the economic cost and lost time associated with the training of laboratory employees. The owner was "production-centered," not "people-centered," to borrow terms employed by Blake and Mouton (4). The thought, therefore, of conducting exit interviews had not occurred to the owner, Flaherty related. When team members first contacted the employees who had resigned, the employees were only vaguely aware of their reasons for dissatisfaction with the work. Probing revealed that workers in the laboratory's dark room experienced job dissatisfaction caused by a lack of illumination. The team thus recommended that the owner obtain the services of visually impaired workers instead. Implementaton of that suggestion greatly reduced the personnel turnover problem.

The preceding illustrations relate SBI success stories gauged in terms of entrepreneurial frames of reference. The preponderance of SBI-related literature is directed toward the business person; little research has been directed toward the student. The significance, then, of this study lies initially in gathering of student perceptions toward the SBI program and secondly in providing an analysis of those perceptions to the participating educators, the Small Business Administration, and the students themselves. The information obtained can be utilized by the business school and the supervising professors to enhance the quality of the business curriculum. The Small Business Administration likewise may utilize the information to encourage a strengthening of the program. Moreover, the students may strive to improve the quality of their counseling efforts. If the students believe that their contributions are useful and are so perceived by academia, government, and industry, they may work more diligently and, in the process, improve counseling quality.

Such a possibility becomes increasingly likely if one believes the students' counseling experiences analogous to employment experiences. A review by Vroom of 23 studies conducted at the University of Michigan shows that 20 of the studies resulted in a positive correlation between job satisfaction and productivity (29). These data indicate the

students' positive perceptions of the SBI programs and their willingness to contribute to the program are influenced by organizational climate formed by the triad of school, government, and the firm. McGregor likewise points to organizational climate as an element in determining level of performance (19). The combination of the business school, the SBA, and the individual firm should engender a climate which challenges and intrinsically rewards the participating students. This study explores students'reactions to the SBI involvement.

Limitations

A limitation of this study is the fact that the student consultants were drawn exclusively from collegiate schools of business in only one region of the state of Texas.

A second limitation of this study is that the students performed the bulk of the course away from class. Consequently, there was no means of establishing equality of time spent by the students in the SBI project.

Procedures for Collection of Data

In an effort to assess student perceptions toward the Small Business Institute (SBI), a questionnaire was developed and sent to a five-member panel of professionals having relevant expertise. Four of the panel members were faculty sponsors of SBI programs offered at regional business schools in Texas. The fifth panelist was a professor of business communication and a management consultant. The content validity of the questionnaire was thus established through a subjective appraisal of items by recognized authorities in the areas of the Small Business Institute and business communication. The procedure was in accordance with that described by Borg and Gall:

Content validity is the degree to which the sample of test items represents the content that the test is designed to measure. One type of content validity is face validity, which refers to the evaluator's appraisal of what the content of the test measures. Unlike the other types of validity, the degree of content validity is not expressed in numerical terms as a correlation coefficient (sometimes called a "validity coefficient." Instead, content validity is appraised usually by a subject comparison of the test items with curriculum content and the skills that they purport to teach (6).

Minor modifications of the questionnaire were made based upon recommendations made by these authorities.

In order to determine the reliability of the instrument, a pilot study was undertaken in April, 1979 in which fifteen upper-level students of management/marketing at North Texas State University participated. The pilot study resulted in minor modification of the instrument. Respondents expressed little difficulty, if any, in comprehending the questionnaire. In the reliability sample, on the average, responses differed by more than one point on the scaled instrument only 17 per cent of the time, thus indicating a high level of reliability. In a clear majority of the cases, respondents answered the thirty items identically in the two administrations of the instrument. The average Spearman-Rank correlation coefficient was .994.

The questionnaire was circulated during the Spring 1982 semester to all SBI students enrolled at six institutions in Texas: North Texas State University, Texas Tech University, the University of Houston at Clear Lake City, Baylor University, Stephen F. Austin State University, and Southwest Texas State University. The initial questionnaire was administered during either the first or second week of the long semester. In every instance, the instrument was given to the students prior to the students' initiation of contacts with SBI clients. The follow-up questionnaire, identical both in content and design to the first instrument, was given three months later to the same body of students with two exceptions: First, the later body of students was less numerous than the initial body as a result of attrition in the SBI program. Second, the follow-up guestionnaire differed from the initial instrument in one respect. The later instrument asked each SBI student to indicate either participation or non-participation in the initial administration of the instrument. Questionnaire responses indicating non-participation were not used in tabulating results of this study. The sample size still was sufficiently large to generate meaningful results even with this deletion.

Procedures for Analysis of Data

The pre-administration and post-administratin questionnaires were checked for completeness prior to keypunching. The keypunched data were verified by the North Texas State University Computing Center. The Kolmogorov-Smirnov statistic was employed because of its relative power and efficiency for testing two independent sample groups between and within schools. These data are detailed in Chapter IV. Siegel (24) characterizes the Kolmogorov-Smirnov test as more powerful in all cases than the median test and roughly equivalent to the T-test. The Kolmogorov-Smirnov test is more appropriate than the T-test for the analysis of ordinal data and was therefore utilized in this investigation. The Chi-square statistic also was employed for its facility in complementing and completing the Kolmogorov-Smirnov application.

The information obtained from the questionnaire items is reported in terms of frequency and percent by school setting on pre-administration and post-administration bases. In order to test the hypotheses, comparisons were made within and between the schools. The following chapter discusses the results of the inquiry.

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CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The scope and nature of business consulting have evolved in response to multiple types of problems which require expertise often unavailable within a troubled firm. The small firm frequently experiences problems related to the limited experience of the owner and employees, inadequate lines of credit for the firm, personnel difficulties and other possible problems. Businesses therefore may elect to engage the temporary professional services of an advisor or business consultant. The consultant basically attempts to identify problems which confront the firm and to propose appropriate remedial action for the resolution of those problems.

The following section explores the literature of business consulting with emphasis upon utilization of students as trainee consultants. Moreover, the study examines predecessor movements which have provided student training apart from the traditional classroom. The study then surveys the history of management consulting and focuses on some contemporary concerns of business. The work then

addresses the literature concerning utilization of Small Business Institute (SBI) students as trainee consultants.

One might conclude in error that the SBI was generated autonomously. On the contrary, the SBI is an outgrowth of a variety of predecessor movements. This section therefore explores the development of the American educational experience that has evolved in isolation from the customary classroom. The origin of such training may be traced loosely through apprenticeship training for economically deprived youth of the seventeenth century. The methods of growth through apprenticeship employed in that colonial period closely resembled the English model.

Apprenticeship Training in Colonial America

Since no public education existed in the United States prior to 1890, the children of the more economically affluent families were educated in private schools and received an essentially academic education. Apprenticeship training, on the other hand, was attuned more toward developing motor skills and manual discipline than toward aesthetic values. Writers are divided with respect to whether the apprenticeship training employed in colonial America provided a sound educational system for youth or merely exploited them.

The popularity of apprenticeship training began to decline with the outbreak of the Industrial Revolution, the critical event which marked this nation's metamorphosis from a simplistic, agrarian society to a more enlightened urbanized society (63). The rapid development of power machinery, coupled with an increased demand for goods, led to a greater demand for labor than could be met by apprenticeship. Max Weber (63), German economist and sociologist, addressed this unfolding social condition and foresaw the industrialization trend. Changing technology swiftly generated the need for more specific occupational training and for advance planning for one's life work. Career counseling consequently was introduced by a Boston educator, Frank Parsons, shortly following the turn of the twentieth century. Parsons is credited with having coined the term "vocational guidance". Moreover, Parsons was influential in organizing vocational guidance programs in public education (46).

Public education had been introduced to the United States several decades earlier. The innovation encountered resistance, however, and was attacked as "too bookish, too elitist, and unrelated to the realities of life" (46). In an apparent effort to avoid the elitist image, vocational education was, except for teacher candidates, largely directed toward students of trades and crafts and not the

professions. Proponents of vocational education claimed that it gave participating students an opportunity to learn the social and cultural backgrounds of their vocations as well as the skills involved.

Trade and industrial education have gained wider acceptance throughout the twentieth century. A frequent beneficiary of favorable legislation, this sector traditionally has been the recipient of governmental funding.

For much of this century, the typical American collegiate school of business has limited its academic offerings to the standard in-class curriculum. In the 1960's, however, some business schools, in opting to provide students with a reality orientation, arranged with area firms to supply students for consulting services. This plan was designed to give the student a "real world" experience and, at the same time, to aid a business firm, thereby fostering improved academic-community relations.

Today there exists an acknowledged need for services of management consultants. This demand has resulted from a variety of problems which have proved insoluble to organizational management. Financial difficulty, for example, frequently plagues the troubled firm. Patterson and McCullough (47) report that 80 per cent of newly established firms succumb within a year of inception. The writers

conclude that many failures could have been averted through a more judicious planning strategy and a clearer understanding by the owner of the market to be served.

In essaying the financial requirements of the small firm, Boyer (9) reports that the traditional cost of capital methodology has but limited application to the small firm. The author notes that the small firm differs markedly from the corporate giant for which cost of capital methodology was devised. Smaller firms are compelled to pay higher rates of interest for borrowed capital, the writer asserts, because of increased risk which is inherent in smaller firms.

Walker and Petty's (61) related research likewise contrasts the financial profiles of small firms with larger firms. Random samples were gathered of both small and large manufacturing concerns for purposes of comparing their financial characteristics. The five financial operational dimensions which were analyzed included liquidity, profitability, financial leverage, business risk, and dividend policy. The authors concluded that small firms bear relatively greater risks of failure than do larger operations. This condition seems attributable at least in part to a propensity of smaller firms to plan less thoroughly than their larger competitors.

Potts (52) reports that significant differences exist within the operational strategies of successful and unsuccessful firms. Although a positive correlation existed between small business success and the uses of accounting information provided by outside services, a negative correlation existed between small business success and the uses of accounting personnel within the firm.

Powell and Bimmerle (53) in related research found that successful entrepreneurs tended generally to possess a consonance of character traits, personal fitness attributes and cognitive, interpersonal, and experiential-based skill. The researchers further noted that, despite the enumerated givens, predictive utility is quite limited in attempts to apply simple models to complex situations for purposes of forecasting entrepreneurial outcomes. Unforseeable negative events could contravene an otherwise workable plan, the researchers note.

Given the high failure rate of small business, Jacobs (27) contends that the survival prospects for this sector can be enhanced significantly. The author advocates purchase of a franchised operation. Reinforcement for this belief is provided by the statistics of only 175 nationwide failures among 26,581 outlets in 1981. The failure rate of .7% contrasts quite drastically with an overall failure rate of 80% for all new small business, Jacobs notes.

The franchisee essentially exchanges a measure of independence for added security. Franchising, however, entails a cost. One-time franchise fees may exceed \$20,000 and the franchiser often controls other facets of the operation, such as requiring that the franchisee purchase inventory from the franchiser. The franchiser typically provides extensive consulting advice on an ongoing basis to the franchisee. In exchange, the franchisee may pay to the franchiser a royalty of from 2% to 5% of gross sales for the life of the operation.

Five forces in today's society which have dictated the growing reliance of firms upon business consultants:

 changes in business and labor legislation which create a need for objective opinions from lawyers or mediators;

 increased intra-industry and inter-industry competition, creating a need for detailed cost studies and analyses;

3. changes in marketing practices and techniques which call for the uses of marketing research, packaging, design, psychological, and other specialists;
4. increasing complexity of the corporate structure which calls for outside analyses of

management; and
5. increased technical research calling for

specialists' help on complicated and unusual problems.

Uses of Management Consultants by Businesses

Bergman (6) observed that the professional consultant typically is expert in one functional field of business. Alternatively, the consultant might extend services as a general practitioner or a general management consultant. Many such professionals work on a full-time basis in

consulting capacities. Other professionals limit consulting activities to a part-time status.

Consultants, whether full-time or part-time, are used for various combinations of these ten basic reasons, Gottfried (20, 32) notes:

consultants' possession of unique skills in 1. some significant area; consultants' possession of specialized skills 2. which are required only on a one-time basis; as an alternative to hiring full-time personnel 3. within rigid company wage scales; 4. unavailability of needed skills in the fulltime marketplace; consultants' abilities to provide outside 5. objectivity; 6. consultants' access to both valuable sources of information and other services; consultants' prior experience with similar 7. problems; top management's increased respect for outside 8. rather than internal opinions; other pressing demands on the time of company 9. executives; and, possibility of obtaining education and 10. training for company personnel.

Lovey (34) also has conducted a study relative to the potential value of a consultant to a firm. The study concludes that objectivity, technical and analytical skills, and a willingness to explore new routes are attributes which businesses seek from consultants.

Frankenhuis (18), in other research, suggests that a consultant can aid a business in these two ways: by providing specialized advice for the future and imaginative solutions for the present. The theorist additionally maintains that inadequate forethought often goes into the selection of a consultant, thereby guaranteeing a suboptimal outcome from the consulting experience.

The extent of assistance which consultants may render to troubled firms often is nebulous. An easier task would be to determine the level of need for organizational change. Along those lines, Haslett (22) recommends a systematic approach to deciding when outside counsel is warranted. Haslett suggests use of a decision table. The table is segemented into quadrants. Variations within each quadrant point to different levels of need, ranging from minimal to substantial. Haslett observes that even as organizations experience varying levels of need for outside assistance, consultants' abilities to meet those needs also vary greatly. Nation's Business (42) also notes that marked differences exist in the quality of service rendered by consultants. The article suggests that many self-proclaimed consultants have had little or no formal training for consulting. The article notes further that a significant number of entrepreneurs who engage consultants have only a vague understanding of the results which the firm can expect from the counseling relationship. The study stresses the importance of an understanding between the parties, noting

that mutual expectations should be expressed openly at an early stage of the interaction.

The client consultant relationship is the focal point of Fisher's (17) concern. The author cites compatibility between the parties as crucial to the success of the clientconsultant interactive experience. The researcher maintains that an adversary relationship between the parties can thwart the success of even brilliant recommendations.

Peterson (48) suggests that the prospects for the success of a consulting experience can be abetted with the implementation of certain operational strategies. The theorist maintains that the presence and the purpose of the consultant should be explained clearly to employees of the organization which has sought outside counsel. Moreover, conditions for improvement are fostered when employees perceive the consultant as a facilitator, not an adversary, the author states.

Relative to client integrity, Peterson (49) stresses that the owner or manager of the firm should refrain from any understatement of the level of organizational problems. That caveat is especially applicable in early interactions between the client and the consultant, Peterson asserts. The author concludes that a high degree of mutual trust between the client and the consultant can facilitate a professional climate in which beneficial results can be attained.

Hayes and Abernathy (23) suggest that optimal success is contingent upon adequate organizational planning. The authors note a particular paucity of strategic long-range planning in the smaller firm. In other research, Nemec (44) focuses attention upon problems which particularly beset the smaller firm. Such issues as organizational costs, expansion costs, self-assessment, affirmative action, and rapidly changing technology are substantial hurdles for many small businesses. The author suggests that a consultant should prove helpful in addressing and resolving such problems.

Justis and Kreigsmann (31) suggest that advance planning is essential to the success of an enterprise. The theorists report that advance planning, including the feasibility study, can rescue a marginal operation from failure. Pre-need planning should be particularly beneficial in the creation of a new business or in the expansion of an existing one, the authors assert. Moreover, early planning should help to identify projects that would likely result in failures, given practical assessment of the processes associated with entering business. The authors include as a component of advance planning an ability to locate and effectively use resources. The study concludes that a consultant should be useful in these areas and in helping to implement more efficient cash flow patterns.

The preponderance of the literature supports the assumption that a consultant is an asset to the client firm. Small firms, nevertheless, fail to utilize consultants to any major extent. Operators of small businesses frequently express a reluctance to invest the additional capital required to pay the consultant. Additionally, some entrepreneurs express an unwillingness to sign a consultancy contract for other reasons. One such reason is a belief that utilization of an outside advisor would constitute an admission of failure.

The premise that small business generally is reluctant to utilize change agents is reinforced by a study conducted by Krentzman (32). He notes that United States firms collectively pay four hundred million dollars per year for consultancy services. Of that amount, only two million dollars, or .5 per cent, is paid by small business firms. The small business sector, composed largely of sole proprietorships, experiences a far higher failure rate than the larger corporate sector. The writer reports that only 54 per cent of some 700 small firms which were polled by him reported ever having engaged the services of a consultant. Furthermore, Krentzman defines a small business as a concern which employs fewer than 100 employees, has a sales level

that falls within the bottom quartile of its industry, and has four or fewer decision makers.

Nemec (44) suggests that regardless of the size of a business, its success depends largely upon the competence of its personnel. The author asserts that an effective change agent should prove useful in identifying able personnel. Moreover, Rothwell (54) suggests that the human resource is the most vital part of an organization and that personnel should be willing and able to render more than minimal service.

Schein (55) concurs with Rothwell in suggesting that selection, promotion, and retention of competent employees are essential to the success of a firm. The theorist further asserts that a consultant should have sufficient skill to help in resolving general problems and particularly in personnel matters.

Finance (17) reports that the mangement consultant has assumed an increasingly important role in the corporate sector in recent years. Simultaneously, a major thrust has developed in the popularity and complexity of corporate mergers. An investigative study published by <u>Finance</u> explores some ways in which qualified consultants have assisted firms engaged in merger discussions. Consultants who wish to provide service to merger candidates should provide third-party objectivity, serve as an effective

intermediary between two company presidents, and possess an ability to handle confidential information. Additionally, consultants should have access to lists of prospects and an ability to counsel chief executives who have given years of service to companies which are being sold. Other duties of consultants often include the writing of an extensive report on the client's past performance and future capabilities. Yet another part of the merger consultant's responsibility could entail a search for the proper business associate for his client, the handling of early negotiations and resolution of conflicts in the final stages of negotiating, Finance reports.

Applications of Quantitative Techniques

The literature reflects use of several quantitative tools in consulting activity. Alves (2) notes that, through the development of linear discriminant models for financial forecasting, a small manufacturer's vulnerability to failure can be predicted with substantial accuracy. Inclusion of industry averages and other variables, such as owner/manager characteristics, should improve the validity of prediction, Alves reports.

Another quantitative tool which can prove beneficial is ratio analysis. McCaughey's (39) five-year longitudinal study examined 96 commercial borrowers in Colorado. His research noted that an application of 18 financial ratios significantly aided prospective lenders in making improved loan decisions. The same investigation further concluded that single-year financial ratios were useful components of taxonomic profiles. Financial ratios were taken at the time of loan initiation and one year afterward.

In related research, Jackson (29) viewed financial ratios as indicators of payment or default of bank loans by small businesses. The study found that data contained in small business financial statements were useful for shortterm bank loan decisions. Jackson prescribes the following criteria for evaluating the viability of a firm:

- large quantities of data with improved reliability coefficients should be formulated;
- analytical methods require additional refinements of the data; and
- 3. the limitations of statistical lending decision models should be recognized.

Patrone and DuBose (45), like Jackson, draw inferences from uses of financial ratios. These researchers conclude that ratio analysis may be used appropriately in a comparative manner with reference to the past and present, as well as for projection of future time periods. Uses of comparative industry averages as well as events both internal and external to the organization were additionally considered by the researchers. Patrone and DuBose underscore the fact that financial ratios can be utilized in recognizing trends and in possibly circumventing unwanted outcomes.

Mayo (38) similarly espouses the value of ratio analysis for small business. He suggests that an entrepreneur think of ratio analysis in terms of three basic stages: selection, interpretation, and use. The author suggests that a businessperson should take care to employ only relevant ratios during the initial stage. Such action should reduce the complexity of ratio analysis in the two remaining stages, Mayo concludes.

The nature and scope of business consulting have been shaped by the problems of the business organization, reports Senery (55). The business concern long has faced a myriad of problems, ranging from limited professional backgrounds of key members of the firm to inadequate financing to externally generated problems. An example of the latter problem is an economic downturn. The author notes that numerous firms have begun to restructure marketing practices in order to adapt more adequately to an evolving business environment. Change agents have proved to be helpful in directing management to clearer recognition of problems and toward more expeditious, more satisfactory resolution of problems, Senery concludes.

Gumpert (21) cites yet another quantitatively-based tool. This researcher has noted that early detection of

venture success or failure can be improved by measures of profitability, cash flow, and capital productivity. In noting that the foregoing measures are functions of managerial decision making, the writer suggests that businesses should strive for improved decision making techniques. Gumpert concludes that such a goal is even more critical when the growth rate of the venture depends on improved decisions.

Dunham's (14) study of seventeen small proprietorships concludes that the most critical need of the small firm is for a thorough analysis of basic needs. In addition to identification and analysis of basic problems, Dunham asserts that the small firm needs the specialized training which a conslutant should be able to provide.

Miron and McClelland (41) concur that small businesses should draw more fully from consultant expertise. They conducted a series of experiments which were intended to measure the effectiveness of achievement motivation training on small business performance. After considering numerous contingencies, the researchers determined that such training significantly improves small business performance in many cases. The extent of the improvement noted in the study was influenced significantly by the effectiveness of the change agent. Other determinants included loan availability, market opportunity, and accessibility of a labor supply. The authors assert that their conclusions are especially applicable for the smaller firm but that the type of small business is not a significant factor.

Survival, the initial objective of business, is particularly a struggle to the small concern. Business failures of 1982 and early 1983 occurred at levels not seen in the United States for a half century. Since that time liquidations of several national concerns and retrenchment activities in scores of others have been commonplace. The failure rate has been notably higher among sole proprietorships than with corporations. Gitman (19) reports that business failures can result from both internal and external factors or from a combination of those factors. The author cites mismanagement as the primary cause of business Numerous managerial errors can result in organifailure. zational failure. Examples of mismanagement include overexpansion, underestimation of capital requirements, high production costs and general managerial ineptness, Gitman reports.

In another study related to business failures, Peterson and Lill (50, p 83) report that significant differences exist between the operating strategies of successful and unsuccessful businesses. The authors note that successful firms tend generally to employ the following specific techniques:

- Focus upon the development of definite consumer-related goals;
- Generate clearly defined marketing policies and procedures;
- Consider offering a broader array of services to consumers;
- 4. Define the target market very tightly;
- 5. Attempt to generate favorable word-ofmouth advertising.

The authors observe that not all the actions are necessarily applicable to all small businesses. The team acknowledges that some firms lack the human and material resources to succeed. The authors suggest that if a firm would evaluate its ability to adopt useful success measures it would likely become aware of a wider array of alternatives.

Vozikis (61) reports that little research has surfaced relative to the problems of small business except on a retrospective basis. The author hypothesizes that certain types of problems are likely to occur at predictable stages of a firm's development. Moreover, Vozikis concludes that a pre-awareness of specific kinds of potential problems should induce the proprietor of a small business to operate the firm with greater skill. Such action should preclude some of the operational pitfalls, Vozikis asserts.

Welsh and White (65) report that the bulk of the literature on managerial theories and practices has been directed toward the large corporate firm. The researchers suggest that the underlying premises on which many practices

are based tend to dissolve when applied to the sole proprietorship. Owner-managers need their own special tools and methodologies for coping; consultants likewise need to be aware that many traditional concepts which are effective for big business should be reexamined before being applied to small firms, the researchers conclude.

In other small business research, Brannen (10) states that a national business panel should be employed to create a reliable, comprehensive, and enduring data base for the dissemination of small business research. The potentially bountiful crop of small business research findings could be managed by the Small Business Administration in cooperation with interested individuals and organizations. The combined entities collectively would sponsor a conference designed to implement the achievement of various goals designed to enhance profitability of small business.

A study conducted by Egerton and Bacon (16) indicates that a firm should have a valid perception of its problem before engaging a consultant. These authors note further that the firm should have a good idea of the appropriate role of a consultant. In addition, management should not expect that the benefit to be realized from the engagement will be immediate. The authors add that typically a client will seek to evaluate the association in terms of instant, tangible benefits which can be ascribed specifically to the consultancy effort. If the client is able to define in precise terms the problems to be addressed, the degree of success from the consulting activity should be more tangible, the authors conclude.

A preponderance of the literature presupposes that the consultant will interact honestly with his client. Waterbow (63), however, adopts a counter position in suggesting that the consultant and the client have opposing interests. The author maintains that the primary aim of the consultant is to determine how management wishes the final report to read and then to prepare the report accordingly. Waterbow believes that most consultants knowingly deceive their clients and are forced into that pattern through their own firm's highly competitive orientation. The theorist indicates that consultants usually try to apply traditional management principles but often assume too rigid an approach or misuse the principles.

In employing consultants, clients should ensure that the assignment is defined precisely. Moreover, the client should at periodic intervals monitor the progress of the consultant. Waterbow specifically advises against bringing a consultant into the organization on a permanent basis.

A highly specialized aspect of consulting is the change agent's focus upon behavioral modification of key personnel within the firm. Bennis (5) describes in the book, <u>Changing</u> Organizations, three primary methods for bringing about behavioral change. These techniques, which often are combined, are: (1) training, which refers to laboratory and sensitivity training of key personnel; (2) consulting; and (3) applied research, in which the change agent uses the results for interventions and as feedback to the client system. Bennis suggests the advisability of a collaborative effort between consultant and client in the interest of achieving an optimally effective organizational change.

Argyris (3) substantially concurs with Bennis in terms of methodology for achieving favorable organizational change. He suggests that the corporate concern often has a bureaucratic structure which traditionally reflects these characteristics: rationality, objectivity, predictability, conformity, defensiveness, and covert conflict among personnel in the organization. In addressing the composition of the bureaucratic organization, Argyris maintains that rigid adherence to existing patterns can prove detrimental to a firm. The theorist contends that such organizations should be receptive to change. Organizational change as prescribed by Argyris would result from an implementation of these four steps: (1) diagnosing the executive system; (2) obtaining verification through feedback to executives; (3) executing a laboratory training program in which the participants are segmented into

experimental and control groups; and (4) evaluating the impact of the program in terms of enhanced competence by the participants.

When the laboratory training was adapted to business settings, however, the participants experienced difficulty in relating the need for behavioral change to the nonparticipants of the experiment. The theorist cautions that models and concepts can be tested only in an organizational setting that welcomes openness and experimentation. Moreover, such a climate should be established in the ranks of top management; otherwise, a potentially worthwhile program could be aborted by ill-informed management, Argyris concludes.

The theoretic orientation of both Bennis and Argyris is behavorial. Any beneficial derivative to be gained by an organization in adopting the techniques which those theorists espouse would be difficult to quantify. Moreover, Argyris offers a caveat to would-be adopters of the behavioral approach. He cautions that attempts to modify human behavior could prove interpersonally threatening, especially in interactions which link participants of sensitivity training with non-participants of the training.

Neither Bennis nor Argyris specifically prescribes sensitivity training as the panacea for the problems of the proprietorship. Research incident to the present inquiry

suggests that the entrepreneur perceives the value of such training to be negligible, nonexistent, or even negative. Respondent businessmen generally viewed such experiments as frivolous. More specifically, entrepreneurs felt that sensitivity training generally failed to address specific problems of the concern.

Research conducted by Blake and Mouton (8) draws only peripherally upon the behavioral sciences. Their research in organizational change draws mostly from the multidimensional systems-oriented approach. The method is implemented in these phases: (1) grid seminar concerning theories of behavior; (2) teamwork development; (3) intergroup development; (4) development of an ideal strategic model; (5) planning and implementation; and (6) systematic critique.

Blake and Mouton envision the function of a consultant in a limited number of ways: theory input, design of grid seminar experiments, a global summary and critique, and the ultimate development of an ideal organizational model. The latter step would be accomplished with the cooperation of top-level management.

Blake and Morton advise that the firm engage the services of an outside consultant. An internal specialist might experience discomfort in relating to higher echelon personnel. The collaborators further recommend that a coordinator of organizational development be given responsibility for obtaining the needed consultant contributions at appropriate times. This individual would serve as the corporate liaison with outside counsel in applying this model.

In other research, Beard (4) describes a project conducted by state agencies within Arkansas. The project was designed to encourage uses of outside consultants as a means of strengthening small business manufacturing operations within the state. A mail campaign conducted by sponsoring agencies produced only twenty-three applications for assistance over a fifteen-month period, a disappointing response ratio. Approximately one per cent of the small manufacturing facilities then based within the state submitted responses. A majority of the responding organizations were assisted, however, Beard notes, adding that a plurality of the respondents earlier had experienced refusals of loan requests from traditional lending agencies.

Nation's Business (42) offers suggestions on optimizing the effectiveness of a consultant. The publication suggests that an entrepreneur should have some preconceived ideas relative to when and how to contact a consultant. The entrepreneur likewise should formulate a checklist of desirable organizational goals, the article asserts. Suggested reading matter for prospective clients: "How to Get the Best Results from Management Consultants" published by the Association of Consulting Management Engineers, Inc. Other literature pertaining to client perceptions of consultants is reported by <u>Business Week</u>. Specifically, the publication reports that client perceptions toward the consultant are more highly influenced by the firm's condition and previous attitudes than by the performance of the consultant.

Charlesworth (12) likewise reports a high measure of subjectivity as well as resistance in the ranks of business management toward prospective change agents. Repeated contacts should begin to build acceptance with the client, the author notes. A study conducted by Charlesworth disclosed that only twenty-five per cent of the operators of small businesses voiced receptive attitudes toward the advisor at the initial visit. After four contacts, however, almost three-fourths of the clients expressed receptivity toward the consultant.

A search of the literature reflects some evolution of thought relative to comparative utility of different types of change agents. Rosenthal (53) prescribed a type of broad gauge managerial advice which allegedly could not be supplied by accountants, tax attorneys, or bankers. Instead, only consultant management engineers were qualified to dispense the needs recommendations, the author asserted.

The author further espoused utilization of managementassistance investment trusts, management cooperatives, or community development cooperatives as useful conduits for marketing needed services to smaller clients.

Research subsequently conducted by Steinmetz (59) reflects diametric opposition to the position of Rosenthal. Specifically, Steinmetz asserts that every small business needs the advisory services of an attorney, an accountant, and an insurance agent. The author establishes that as a prerequisite condition the prospective change agent must be able to work well with each of those professional specialists in order to enhance his or her effectiveness to the client firm. Moreover, the consultant would appropriately maintain lines of communication with management of the firm being consulted. The climate resulting from such preparatory effort should foster conditions favorable to positive change, Steinmetz asserts.

In other small business research, Jones (30) suggests utilization by smaller firms of a mathematical programming technique. Specifically, Jones recommends goal programming as a useful decision tool for allocating sources of capital and for determining the optimal financial mix for a small business. The theorist notes that small businesses often fail to plan adequately for financing needs. Moreover, he proposes that proper utilization of the mathematical programming technique should substantially assure an improved level of planning.

Edmunds (15) similarly addresses the need of the small firm to plan more thoroughly its financing needs. Edmunds notes in particular that small firms generally can make better estimates of profitability, capital productivity, and cash flows than is currently being done. The theorist suggests that more adequate financial planning among operators of small businesses would significantly reduce the high failure rates which traditionally have plagued that sector.

McLeer and Stowe (40) suggest the use of a consultant to assist entrepreneurs in determining their financial needs. For the entrepreneur who wishes to maintain a more active role in mapping organizational strategy, the authors stress the value of stringent money management. The researchers also offer suggestions for the small business proprietor seeking external financing.

Hutt (26) advocates the focus group interview for the entrepreneur who seeks self-help. This methodology is so named because owner-operators of small businesses meet to discuss mutually-shared problems. The focus group interview is especially recommended for gaining in-depth information on a problem.

Albert (1), like Hutt, believes that many business operators are capable of performing much of the consultancy function for themselves. He characterizes the management consulting process as a matter of defining problems, gathering information, making analyses, and forming conclusions. The entrepreneur-consultant then would implement the most feasible alternatives. In the interest of optimizing owner wealth, Albert recommends examination of these nine areas of concern to a profit-seeking enterprise: organizational growth, acquisitions, new products, marketing, sales, organization, executive search, executive compensation, and facilities planning. In acknowledging the limits of do-it-yourself consulting, Albert provides suggestions on how to obtain the services of qualified management consultants.

Beard (4) fails to share Albert and Hutt's enthusiasm for entrepreneurial self-help. Instead, Beard assumes that organizational problems are beyond the skill level of management. The author describes a small business assistance project sponsored by a southwestern state. The project was designed to strengthen small manufacturing facilities operating within the state. The small manufacturing sector was then experiencing what state officials considered to be an inordinately high failure rate. The initial and foremost problem encountered by the study was in locating organizational managements willing to accept business counseling. Lending agencies, however, proved helpful in this regard. This was particularly true among manufacturers whose loan requests had been denied. Beard noted little correlation between a firm's need for counseling assistance and willingness of its owner to accept assistance. Beard concluded that numerous reluctant recipients profited significantly from business counseling.

Other literature included in this study substantially corroborates Beard's findings. For any number of stated reasons, organizational management in general has shown an aversion to engaging the services of change agents. The literature further suggests that this phenomenon is especially prevalent among smaller businesses.

A search of the literature additionally indicates that failure rates among proprietorship and partnership enterprises markedly exceed corporate failure rates. Moreover, data discloses that a majority of sole proprietorships perish within five years of inception. Despite an impressive data base relative to business failures, prior studies have produced only limited data relative to the effectiveness of students as trainee consultants. Data are even further limited with regard to the students' beliefs concerning their influence in helping to achieve desired change. This study was thus designed to identify beliefs or

attitudes. The attitudes held by these students should be meaningful. An association of some four-months' duration should have generated some insightful thoughts among the students regarding the SBI experience. In addition, a realization that their observations are valued could prompt the students to work more conscientiously. The remainder of this section considers research which addresses multiple dimensions of the SBI program.

The SBI and Its Predecessor Activity

Gumpert assesses in critical terms the federal agency which authorized creation of the SBI. The author notes that the SBA was formulated by Congress in 1953 as a successor to several depression era, World War II, and Korean War agencies that provided financial assistance to small businesses. Gumpert reports that the agency's responsibilities have expanded significantly over almost thirty years. This growth has come despite a barrage of mounting criticism of Some small business management organizations the SBA. allegedly view the SBA as an overgrown, inefficient, and scandal-ridden bureaucracy that fails to serve adequately the needs of its constituency. The author suggests that the SBA serves as a poor role model for small enterprise and that the agency should be dismantled. Implicitly, Gumpert's

proposed dismantling of the SBA likewise would mean termination of the SBI program.

A majority of other researchers view the SBI in more favorable terms. Solomon (56) asserts that the Small Business Institute provides small business with a practical, economical solution to a widespread need for management assistance. The author acknowledges that the SBI program is not problem free. Moreover, Solomon hypothesizes that much of the problem confronting small business stems from a failure to seek help on a timely basis. He concludes that the SBI program should continue to grow and become a greater factor in helping small businesses to survive.

In 1976, two unrelated questionnaire studies were conducted in an effort to obtain insight into the perceived effectiveness of the SBI. One study was directed toward SBI-assisted entrepreneurs; the other was directed toward SBI students. Neither study encompassed the population size of the current study, nor was either study as comprehensive as this investigation.

Burr and Solomon's (11) study was done among entrepreneurs who obtained SBI program assistance over a four-year span. The questionnaire instrument consisted of a five-point rating scale. Response choices were excellent, good, fair, poor, and other. Respondents expressed generally favorable opinions toward the program, with 87.5 per cent

assigning an evaluation of either good or excellent. The remaining one-eighth of the respondents were divided as follows in their response patterns: fair, 6.8%; poor, 1.9%; other 3.8%. The researchers concluded from those data that the SBI program was perceived positively by SBI-assisted entrepreneurs.

Stahlecher and Pabst (58) directed a questionnaire to 166 SBI students participants regarding their opinions of the utility of the SBI program. On the basis of survey responses from that audience, the authors pose suggestions for improving the SBI program. The authors note that SBI cases vary greatly in type, scope, complexity of problems, and type of student research required. Because of this condition, such cases should, therefore, not comprise the entire curriculum of small business management and business policy courses. Secondly, faculty advisors should not be overburdened if their expertise is to be optimized. Teaching assistants can help with the teaching and administration of the program. Finally, further study is needed to determine the SBI program's benefits to clients, students, faculty, and the SBA.

In other SBI-related research, Johnson (28) explores the Small Business Development Center as a vehicle for strengthening the bond between the university and the business community. Specifically, the article proposes

guidelines for establishing a cooperative university-small business community relationship. Counseling services, communication, student internship programs, faculty development seminars and workshops, research, and computer services are discussed.

Although the SBI experience has been designed largely for the involvement of upper-level and graduate students, at least one campus offers a program designed to enable community college educators to assist the management of troubled businesses. In this regard, Nelson (43) underscores two unique characteristics of the SBI program at the University of Illinois. First, this is the only SBI program conducted by a College of Education rather than a College of Business Administration. Second, this program is designed to provide in-service education to community college business instructors. Finally, the participating community college instructors themselves actively consult with small businesses.

In other research, Ruch (55) suggests that SBI-student effectiveness should and can be bolstered. The author indicates that student consultants lack adequate communications skills in interacting with SBI clients. The author, therefore, makes a plea for improved business communications courses. Ruch cites studies which point to the importance to business practitioners of effective communication courses. Convinced that current college composition and public speaking courses are ineffective, Ruch states that business administration programs must establish courses on the process of communication. In particular, the author focuses upon interview techniques, department meeting facilitation, nonverbal communication models, and listening skills.

In other research, Mario and Schultz (37) focus upon the need for enhancing the effectiveness and success of the SBI program. The authors advocate utilization of a holistic approach toward the achievement of that goal.

Another study seeks cohesiveness among the SBIconstituency. Dandridge (13) notes that participants in an SBI program--SBA; the university, faculty, and students; and the client and his/her business--all enter the program with different goals and needs. The theorist, therefore, discusses goals of the various constituency and the necessity of finding ways to integrate these divergent goals succinctly and convincingly.

Along similar lines, Hicks (24) states that clients should cooperate extensively with SBI student counselors in order to optimize the consulting product. More specifically, the client who derives the most benefit from association with an SBI student counselor is the one who understood and encouraged the student throughout the various stages of the consulting process. Such an analysis presumes that the student is imbued with the aptitude for counseling, Hicks notes.

If the students have innate aptitude for counseling, then they should be able to develop the talent further, note Johnson and Halatin (29). The authors suggest that the student consulting team can enhance its effectiveness by preparing a comprehensive proposal for the client early in the semester. Such action should help to minimize misunderstandings between the client and the consulting team.

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CHAPTER III

PROCEDURES FOR COLLECTION OF DATA

Introduction

The purpose of this study was to determine the perceptions of students of Small Business Institutes (SBI) offered at six Texas-based universities toward the SBI experience. It was essential in the pursuit of this purpose to develop an instrument which would elicit the responses of SBI students enrolled at these universities: North Texas State University, Texas Tech University, University of Houston at Clear Lake City, Baylor University, Stephen F. Austin State University, and Southwest Texas State University.

The Instrument

The instrument employed in this investigation was a Likert-type questionnaire. The instrument was drawn largely from a questionnaire prepared by King, Holbrook, and Hartmann (2) in a 1977 study conducted at the University of Tennessee at Nashville. The authors in the Tennessee study indicate having tested the instrument for both content validity and reliability. Tests for both validity and

realibility were carried out in this study in the manner detailed in Chapter I.

Inasmuch as the SBI program was conceived barely more than a decade ago, the body of knowledge available for the present inquiry was of limited scope. The paucity of related prior research therefore dictated that a special investigation be made as a precondition for arriving at any meaningful conclusions relative to the perceptions of student participants toward the SBI experience. The need, therefore, existed for the creation of an instrument which would garner the desired data.

The initial consideration was to create an instrument which would reflect both relevance and clarity. A questionnaire, therefore, was directed to a five-member panel of professionals having relevant expertise. Four of the panel members were faculty sponsors of SBI programs offered at regional business schools. The fifth panelist was a professor of business communications and a management consultant. The content validity of the questionnaire was established through a subjective appraisal of items by recognized authorities on the Small Business Institute and business communications. The procedure was consistent with that earlier described by Borg and Gall (1). A minor change of the questionnaire was made based on the comments of these authorities. The instrument employed in this study is contained in the Appendix.

The Pilot Study

In order to field test the reliability of the instrument, a pilot study was undertaken in April, 1979, in which fifteen upper-level students of management/marketing at North Texas State University participated. Slight modifications of the instrument resulted from the pilot study. The respondents of the pilot study experienced virtually no difficulty in comprehending the questionnaire.

The instrument was reexamined in the Fall 1981 semester. In view of the elapsed time factor, the questionnaire was directed in October 1981 to a fifth SBI faculty sponsor who had not participated in the prior assessment of content validity. The SBI faculty sponsor recommended after a thorough examination that it be field tested in its existing form. A second pilot study was thus administered to ten upper-level students of management/marketing at Stephen F. Austin State Univesity in November 1981. Results of the replicated study were consistent with the results from the 1979 study.

The questionnaire subsequently was circulated during the Spring 1982 semester to all SBI students at these six schools: North Texas State University, Texas Tech University, Stephen F. Austin State University, University of Houston at Clear Lake Sity, Baylor University, and Southwest Texas State University. The initial administration of

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the questionnaire was given no later than the second week of the long semester and in every instance in advance of any student contacts with SBI clients. This condition was invoked in order to recognize more accurately the level of perceptual change, if any, among the students toward the SBI experience. The second administration was given at least three months following the earlier administration on the same campuses to the same body of students. Student attrition in the SBI program resulted in a somewhat diminished data base among the respondents of the sequel instrument. Responses from those participants who had not participated earlier were deleted from tabulation. The sample size, despite some attrition, remained sufficiently large to generate meaningful results.

The Population

Inquiry was directed to approximately fifteen business school deans at Texas colleges holding memberships in the American Assembly of Collegiate Schools of Business relative to their interest in participating in this SBI study. Thirteen deans or their delegates volunteered to take part in the research. For a variety of reasons, however, seven of the schools failed to qualify for inclusion. Two schools failed to administer the initial or administration of the instrument on a timely basis, two other schools failed to forward follow-up results, and three other schools withdrew following an initial commitment toward the study. The schools which offered the SBI program to the greatest number of students generally participated in the study.

Among the participating schools, attrition in the SBI program within the course of the semester assured that pretest responses to the first instrument would be more numerous than to the second. The initial population numbered 448, whereas the subsequent population totaled 336.

The Survey

The questionnaires were mailed to SBI faculty sponsors early in the Spring 1983 semester. The covering transmittal letter explained the purpose of the study and provided assurances that anonymity would be given the student participants. The promise of anonymity probably assured a greater validity in responses than would otherwise have been possible. The methodology employed permits comparisons by schools between the two test administrations as well as inter-school comparisons.

The follow-up questionnaires, identical in content and design to the earlier instruments, were mailed in time to reach each school by the beginning of the last week of semester classes. Follow-up responses were returned from six participating schools. The returned questionnaires were checked for completeness and then taken to the North Texas State University Computing Center. Data were key-punched, verified, and analyzed. Results of the study are detailed in Chapter IV.

Summary

In an effort to ascertain the perceptions of participating students toward the Small Business Institute, specific research activity was undertaken. This activity involved the development and refinement of a questionnaire. The questionnaire was reviewed by highly qualified personnel and subsequently modified slightly.

A pilot study composed of <u>fifteen</u> student participants at North Texas State University was conducted in April 1979. A field test was given to ten business students at Stephen F. Austin State University in November 1982. Deans of thirteen Texas-based business schools expressed interest in participating in the study. Six schools provided usable responses to both the initial and the follow-up experiments which were conducted in the Spring semester 1982. Results are reported in Chapter IV.

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CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The overall purpose of this study was to identify perceptions of student participants toward the Small Business Institute. Students enrolled in SBI courses at six collegiate schools of business administration were asked to complete on two occasions a questionnaire concerning the SBI program. The first test predated all client contacts; the second test followed extensive contacts between student consultants and clients. The procedures described facilitated a test of these hypotheses:

 There will be no significant inter-school perceptual differences toward the SBI experience prior to the initiation of client contacts by the student participants.

2. There will be no significant inter-school perceptual differences toward the SBI experience subsequent to the initiation of client contacts by the student participants.

3. There will be no significant intra-school perceptual differences toward the SBI experience as measured

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by responses provided by students both prior and subsequent to the initiation of contacts with clients.

Tests of Statistical Significance

Two statistical tests were employed to test these hypotheses. The tests utilized in this study were the Kolmogorov-Smirnov two-sample test and the Chi-square test.

Kolmogorov-Smirnov Two-Sample Test: The Kolmogorov-Smirnov two-sample test is used to test homogeneity of distributions. This test is sensitive to any type of difference in the two distributions, including differences between dispersion, skewness, or median measurement. In this application of the Kolmogorov-Smirnov test, the observed cumulative distributions for two independent sample groups were computed. Moreover, the maximum positive, negative, and absolute differences of these groups were determined, and the Kolmogorov-Smirnov Z also was calculated.

The value of the Kolmogorov-Smirnov Z is based upon the differences between the two distributions, namely the pretest and post-test distributions. The greater the differences, the more significant is the value of the Kolmogorov-Smirnov Z. Thus, if the value of the Kolmogorov-Smirnov is sufficiently large, homogeneity between the variances of the two samples is believed to be non-existent. <u>Chi-square Test</u>: The Chi-square test is used to determine whether there exists a statistically significant relationship between the two variables. The Chi-square test is defined in the Statistical Package for Social Sciences as follows:

Chi-Square is a test of statistical significance. It helps determine whether a systematic relationship exists between two variables. This is accomplished by computing the cell frequencies which would be expected if no relationship is present between the variables, given the existing row and column totals (marginals). The expected cell frequencies are then compared to the actual values found in the table . . , the greater the discrepancies between the expected and actual frequencies, the larger Chi-Square becomes.

A larger Chi-square test statistic reflects a greater difference between the two variables. A sufficiently large Chi-square suggests that there exists a statistically significant relationship between the two variables, and changes in the values of one variable are reflected in changes in the other variable.

Test for Hypothesis I: In a test of Hypothesis I, Chisquare tests were applied to determine whether there were significant inter-school differences in attitudes toward the SBI experience prior to the initiation of client contacts by the student participants. The two variables compared by the Chi-square test were the six schools which participated in the survey and the five response choices for each question. A separate test was performed for each of the thirty questions listed on the survey instrument.

The six schools which participated in the survey were coded as follows:

Number	<u>School</u>
1.	Texas Tech University
2.	University of Houston at Clear Lake City
3.	North Texas State University
4.	Southwest Texas State University
5.	Baylor University
6.	Stephen F. Austin State University

The five possible responses, from which each participant was asked to select one answer, were these:

<u>Response</u>	<u>Meaning</u>
1.	Strongly agree
2.	Agree
3.	Undecided
4.	Disagree
5.	Strongly disagree

Relative to the initial hypothesis, the Chi-square test was applied to determine whether a statistically significant relationship existed between school settings and student attitudes toward the SBI experience. The hypothesis stated that there would be no significant inter-school perceptual differences toward the SBI experience prior to the initiation of client contacts by the involved students. The results of that investigation are reported in Table I. The following data explain briefly each of the columns shown in Table I:

<u>Column Title</u>	Explanation
Question	Identifies the specific survey question or item in a field of thirty such items.
Chi-square	The Chi-square test statistic is the item in reference. Typically, the higher the test statistic, the more signifi- cant or greater the relation- ship between the two variables.
P-value	The probability of committing error in assuming the existence of a statistically significant relationship between the two variables.
Sig	An asterisk (*) indicates that, given the test results, it may be reasonably assumed that a statistically significant relationship exists between the two variables.

A significant statistical relationship was assumed to exist between the school attended by the student participant and response to a particular question. An analysis of the data reveal a strong relationship between school attended and responses to twenty of the thirty items. A relationship was characterized as strong if the P-value was .05 or less. A P-value falling within such a range revealed that the likelihood of error was less than or equal to .05 or no more than one chance in twenty.

With regard to Hypothesis I, twenty of the thirty items reported on the questionnaire were found to be statistically significant at the .05 level. Expressed in percentage terms, 66 2/3 per cent of the questionnaire statements proved to be statistically significant at the .05 level.

The methodology for scaling the questionnaire items and the phraseology of those items each was chosen subsequent to a careful evaluation of alternative patterns. Despite its overall superiority, the ultimate questionnaire design failed to lend itself readily to an overall score for the thirty items. This condition thus underscored a need for further probing, even though major statistical significance unmistakably was demonstrated at the .05 level. An inspection of Table I reveals further information. It can be observed that a change in the level of significance has a confidence factor of 95 per cent; .01 level, 99 per cent; and .20, 80 per cent. Even at the .01 level, 13 of the 30 items are significant.

The fact that 13 of the 30 items proved to be statistically significant at the .01 level of significance suggests the existence of a statistical relationship between

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TABLE I

RELATIVE PRE-TEST LEVELS OF SIGNIFICANCE AT THE SIX SCHOOLS

Question		PRE TEST	
	Chi Square	P Value	Sig
1	32,6938	.1107	NS
2	49.7788	.0015	* *
3	38.8644	.0282	*
4	28.0522	.2578	NS
5	38.0661	.0341	*
6	57.2403	.0002	* *
7	52,6986	.0006	* *
8	54.3635	.0004	**
9	26,0864	.3488	NS
10	36,7933	.0459	*
11	32,8360	.1076	NS
12	23.8602	.4696	NS
13	41.8415	.0134	*
14	74.9968	.0000	**
15	49.6768	.0016	**
16	41.3905	.0151	*

uestion		PRE TEST	
	Chi Square	P Value	Sig
17	29.4940	.2021	NS
18	64.8235	.0000	**
19	55,0621	.0003	**
20	37.7479	.0368	*
21	20.0104	.6962	NS
22	7 4.9 287	.0000	**
23	38.7754	.0288	*
24	51.6333	.0009	**
25	31.4164	.1422	NS
26	33.8977	.0865	NS
27	46.3058	.0041	**
28	30.0759	.1823	NS
29	141.6923	.0000	**
30	78.8270	.0000	* *

TABLE I--Continued

Significant at .05 Significant at .01 Not Significant *

**

NS

the school attended and the answers chosen for those items. Stated differently, responses of the pre-test participants were in fact associated with the schools which they were attending.

On the basis of these data it is reasonable to assume when considering the survey as a whole that there is a significant relationship between the schools attended by the student participants and their responses to the individual items.

To accept this as a valid assumption requires rejection of Hypothesis I. The assumption instead supports the alternative that significant inter-school differences in fact existed in student attitudes toward the SBI experience prior to the initiation of client contacts.

Test for Hypothesis 2: Chi-square tests were employed to test whether there were significant inter-school differences in perceptions toward the SBI experience among the involved students following the invitation of contacts with entrepreneurs. The two variables compared by the Chisquare test were these: 1. the six different schools which participated in the survey and 2. the five response choices for each question. A separate Chi-square test was performed for each of the thirty questionnaire items.

The six business schools which participated in the study were coded as follows:

<u>Number</u>	<u>School</u>
1.	Texas Tech University
2.	University of Houston at Clear Lake City
3.	North Texas State University
4.	Southwest Texas State University
5.	Baylor University
б.	Stephen F. Austin State University

The five response options for each of the thirty questionnaire items are these:

<u>Response</u>	<u>Meaning</u>
1,	Strongly agree
2.	Agree
3.	Undecided
4.	Disagree
5.	Strongly disagree

The Chi-square test for each of the thirty questionnaire items examined whether there was a significant statistical relationship between the school attended and the participating students' attitudes toward the SBI experience as measured by questionnaire tabulations prepared after extensive interaction between the students and their SBI clients. The results of the Chi-square are presented in Table 2. The following data explain the function of each of the columns reflected in the table. These data are provided in order to clarify more fully each of the columns reflected in the table.

<u>Column Title</u>	Explanation
Question	Identifies the specific survey question or item from the thirty-item field.
Chi-square	The Chi-square test statistic is the item in reference. Typically, the higher the test statistic, the more significant or the greater will be the relationship between the two variables.
P-value	P-value refers to the probability of committing error by assuming the existence of a statistically significant relationship between the two variables.
Sig	An asterisk (*) indicates that, given the test results, it may be reasonably assumed that a statistically significant relationship exists between the two variables.

A significant statistical relationship was assumed to exist between the school in which a student participant was enrolled and the student's responses to the thirty-item questionnaire provided that the P-value of the Chi-square test was less than or equal to .05. This condition suggests

TABLE II

RELATIVE POST-TEST LEVELS OF SIGNIFICANCE AT THE SIX SCHOOLS

Question		PRE	TEST	
	Chi Square	P Value	Sig	
1	54.8256	.0003	**	
2	30.2292	.1773	NS	
3	30,4311	.1709	NS	
4	25,4375	.3828	NS	
5	42.6529	.0109	*	
6	55,8656	.0002	* *	
7	30.3572	.1732	NS	
8	94.7650	.0000	* *	
9	40.6926	.0180	*	
10	41,4425	.0149	*	
11	39.1365	.0264	*	
12	43.5377	.0086	* *	
13	30,0676	.1826	NS	
14	70.6344	.0000	* *	
15	43.5518	.0086	**	
16	27.0125	. 3039	NS	

Question	PRE-TEST		
	Chi Square	P Value	Sig
17	60.0286	.0002	**
18	38,5093	.0307	*
19	51.3984	.0009	* *
20	51,2632	.0010	* *
21	52.1424	.0007	**
22	40.8781	.0172	*
23	32.9635	.1048	NS
24	57.3249	.0002	**
25	39,1688	.0262	*
26	33.8710	.0870	NS
27	35.4370	.0622	*
28	26.9051	.3089	NS
29	44.7376	.0063	* *
30	72.9379	.0000	* *

TABLE II--Continued

Significant at .05 Significant at .01 Not Significant *

**

NS

that the probability of being in error by assuming the existence of a significant relationship between the school attended and the response to a given item is less than or equal to .05.

The preponderance of evidence suggests that a significant statistical relationship existed between the school attended by the student participant and his or her response to the scaled questionnaire. The data further suggest that the responses elicited from the students were at least in part a function of the school attended by the responding student. These data relate to student responses reported subsequent to the initiation of contacts with the client entrepreneurs.

Analysis disclosed the existence of a meaningful statistical relationship in the use of a P-value of less than or equal to .05. A P-value of this level is indicative of a probability of .05 or less of error with an assumption of a significant relationship between schools attended by the student consultants and their responses to the thirtyitem questionnaire.

By employing this criterion for significance, only ten of the thirty items proved to be non-significant. Expressed in other words, at the .05 level of significance there was a conspicuously high relationship between the school attended and the student responses for twenty of the thirty questions. The more rigid .01 level proved significant for these 12 items: 1, 6, 8, 12, 14, 15, 17, 19, 20, 21, 24, and 30. The .01 level of significance thus was applicable for 40 per cent of the questionnaire items.

No specific statistical procedure was performed to determine an overall score. An overall score refers to a composite score for the thirty-item questionnaire. The scaling technique and the content of the questionnaire items were established only after a thorough analysis of alternative forms.

Despite its general pre-eminence, however, the chosen questionnaire design failed to lend itself readily toward ascertaining a composite score. This condition, therefore, accented a need for additional probing. Specifically, the questionnaire consisted of thirty statements relative to the SBI. Fifteen of the statements were phrased positively and fifteen statements were phrased in a negative context. An example of the latter style is the statement: "I was unable to help the SBI client."

Although the option employed in this study facilitated a measure of internal consistency, it simultaneously precluded any global measurement of the instrument. It, therefore, became prudent to ascertain the extent of significance at a level other that .05. For that reason, the .01 level of significance also was tested. The responses elicited from the SBI students reveal these data: Among the thirty items listed on the instrument, thirteen items revealed the existence of a significant correlation between the school attended and a student's response to a given question at the .01 level. Following are the 13 items which proved to be significant at the more rigid .01 level: 1, 7, 8, 12, 14, 15, 17, 19, 20, 21, 24, 29, and 30.

By noting the response propensity, thus, the second hypothesis is rejected. In short, there exist statistically significant inter-school differences among the SBI students as reflected in their responses to the post-test questionaires.

Test for Hypothesis 3: Kolmogorov-Smirnov two-sample tests were used to test whether there was a significant intra-school difference between student attitudes toward the SBI experience prior and subsequent to their initiation of client contacts. The two samples compared by the Kolmogorov-Smirnov test were the responses provided by the student participants both prior and subsequent to the initiation of contacts with clients. A separate Kolmogorov-Smirnov two-sample test was performed for each of the thirty items. This procedure was followed at each of the six schools. Following are the six schools which participated in the test:

Number	<u>School</u>
1.	Texas Tech University
2.	University of Houston at Clear Lake City
3.	North Texas State University
4.	Southwest Texas State University
5.	Baylor University
6.	Stephen F. Austin State University

For each of the questions in the survey, the student participants answered with one of these five responses:

Responses	Meaning
1.	Strongly agree
2.	Agree
3.	Undecided
4.	Disagree
5.	Strongly Disagree

The Kolmogorov-Smirnov two-sample test for each question at each school tested whether a homogeneity or equality existed between the two distributions formed by the responses to the survey questions among the student participants. The results of the Kolmogorov-Smirnov two-sample tests are shown in Table 3. The following is an explanation of each of the columns shown in Table 3.

<u>Column Title</u>	<u>Explanation</u>
School	The number arbitrarily assigned to the school (1-6).
Question	Identifies the survey item (1- 30).
Max Diff	Identifies the maximum absolute difference between the responses given for a particular question prior and subsequent to the initiation of client contacts.
K-S Z	Designates the Kolmogorov- Smirnov Z test statistic. Generally speaking, the higher the Kolmogorov-Smirnov Z test statistic, the greater the difference between responses given prior and subsequent to the initiation of contacts with clients.
P-value	The P-value refers to the extent of probability of being in error by assuming that there is a significant statistical difference between responses given prior and subsequent to initiation of client contacts among the participating students.
Sig	An asterisk (*) indicates that given the test results, it can be assumed that there is a significant statistical difference between responses given prior and subsequent to the initiation of contacts with clients.

TABLE III

A COMPARISON OF PRE-TEST/POST-TEST RESPONSES BY ITEM AT THE SIX SCHOOLS

JESTI	ON					SCHO				1	3	
	MAX DIFF	K–S Z	P VALUE	SIG MA Di		K-S Z	P VALUE	SIG	MAX DIFF	K–S Z	P VALUE	SIG
1	0935	.609	.652	.1	213	.678	.748		.4286	1.134	.153	
2	. 4708	3.077	.000	* .3	434 1	.925	. 001	*	. 5714	1.512	.021	*
3	0192	.126	1.000	.1	128	.576	.894		0.0	0.0	1.000	
4	-,0666	.436	.991	.0	917	.514	.954		2143	.567	.905	
5	.0781	.512	.956	- . 1	145	.642	.804		. 2857	. 756	.617	
6	.0249	.163	1.000	-20)05 1	.124	. 160		.1429	.378	.999	
7	2033	1.333	.057	07	74	.434	,992		2143	.567	.905	
8	1 302	. 853	.460	_1 (136	.578	.892		.0714	. 189	1.000	
9	.0333	.218	1.000	0	571	.319	1.000		.2857	.756	.617	
10	0352	. 231	1.000	.05	59	.313	1.000		.2143	.567	.905	
11	.0892	. 585	.884	.06	97	.391	.998		. 2143	.567	,905	
12	0716	.469	.980	.11	79	.657	.781		. 1429	.378	.999	
13	. 1503	.982	.289	12	:03	.674	.7 53		.1429	.378	.999	
14	.2388	1_565	.015	* .28	16 1	. 566	.015	*	.0714	. 189	1.000	
15	0430	.282	1.000	13	91	.780	. 578		1429	.378	.999	

TABLE	IIIContinued	

IESTI	ON	1			SCH(2			:	3	
	MAX DIFF	K−S Z	P VALUE	SIG MAX DIFF	K-S Z	P VALUE	SIG MAX DIFF	K - S Z	P VALUE	SIC
16	.0965	.633	.818	.1406	.788	. 564	.1429	. 37B	.999	<u> </u>
17	- . 0337	.221	1.000	-,2071	1,155	.138	0714	. 189	1,000	
18	0927	.608	.854	.0754	.423	.994	- . 1429	, 378	. 999	
19	.1132	.739	.6 45	.1719	.964	.311	.1429	.378	.999	
50	0789	.516	.953	.1015	.569	.903	- .1 429	.378	.999	
21	0500	.327	1.000	1080	.605	.857	1429	. 378	,999	
22	.0885	. 578	.892	~_0832	.466	.982	.0714	.189	1,000	
23	.0728	. 475	.978	.1108	. 621	,835	.3571	.945	.334	
24	. 1802	1.174	. 127	.1697	.94 5	.333	.2143	.567	,905	
25	1146	.748	.630	1619	.907	.382	0.0	0.0	1.000	
26	- 1622	1,056	.215	0579	,325	1.000	-,1429	.379	.999	
27	-,1392	,909	.380	-,0591	.332	1.000	2143	.567	,905	
28	. 1540	1,006	. 263	0799	. 448	.988	-. 1429	. 378	.999	
2 9	1813	1,184	. 121	~ _0917	.514	.954	- 2143	.567	.905	
30	.0404	. 263	1,000	. 2622	1,469	.027	*1429	.378	.999	

TABLE III-Continued

SCHOOL

QUESTION 4 5 6 MAX K-S Ρ SIG MAX Ρ K-S SIG MAX Ρ K-S SIG DIFF Z VALUE DIFF Z VALUE DIFF Ζ VALUE 1 ,2741 1.358 .050 .0648 ,247 1.000 .1596 .762 .606 2 .001 * ,2946 1,451 .030 ŧ .4884 1.919 .4753 2.326 ¥ 0.0 3 .1171 .578 .898 .1644 .636 .831 .0818 ,396 .998 4 .1700 .837 485 .3056 1.183 .122 **.1**479 .714 .688 5 ,2667 1,321 .061 .2831 1.112 .168 .2846 1.390 .042 * 6 .3074 1,523 ,019 -.1563 ۰ .614 .845 .2016 .987 .285 7 -.2296 1.138 .150 .1748 .687 .733 -.1339 .655 .784 B 2020 .995 .276 .1101 .433 .992 .4392 2,143 0.0 * 9 .0404 .199 1.000 -.2147 .831 .494 -.0754 ,363 .999 10 **.**1120 .551 **.**922 .1304 **.**513 **.9**55 ,2493 1.218 .103 11 -.1641 .808 531 -_1536 **.6**03 ,860 -,1023 .501 .964 12 -,2281 1_123 **.**160 -.1332 .523 .947 -.1349 .660 .777 13 -.1852 .917 .369 -.1351 .531 .404 .941 .0826 .997 14 .4074 2.018 .001 .1526 .600 \$.865 4628 2,261 0.0 15 **1**987 **.**978 .294 .1101 .433 .992 .1457 .713 ,690

TABLE III-Continued

ESTI	ON		\$		SCHO E				6	
	MAX DIFF	K-S Z	P VALUE	SIG MAX DIFF	K–S Z	P VALUE	SIG MAX DIFF	K-S Z	P VALUE	SIG
16	.0481	.238	1.000	-,0749	. 294	1,000	1033	,505	.960	
17	.0990	. 488	.971	.2116	.826	.503	.1935	.933	.348	
18	. 1641	.80_	.531	_2627	1,032	.237	0385	.168	1.000	
19	- . 1338	.6 5_	.778	1092	,429	.993	.0684	.335	1.000	
20	.2741	1.35_	.050	.2174	. 854	. 459	.2171	1,062	.209	
21	.3123	1.53_	.018	* .1480	.582	.888	.1555	,752	.624	
22	0889	.44_	.990	.1138	. 447	.988	1625	.795	.552	
23	.0956	.47_	,979	. 1230	.483	.974	.0875	.428	.993	
24	. 1392	. 69_	.733	.2276	.894	.401	.2033	,995	.276	
25	. 1634	.80_	.542	1998	.785	.568	.1651	.808	.531	
26	.0889	. 43_	.991	-,1554	.611	,850	0451	.220	1.000	
27	.0992	. 45_	.986	. 2655	1.043	.226	1 368	. 670	.761	
28	~.1568	.7	.588	. 1536	.603	.860	1526	.747	. 633	
29	2127	1.0	.227	0876	. 345	1.000	1063	.520	.950	
30	_0716	. 35_	1.000	-,2476	.976	.299	-,2039	.998	.272	

A significant statistical difference was assumed to exist between responses given prior and subsequent to the initiation of contacts with clients if the P-value of the Kolmogorov-Smirnov two-sample test was less than or equal to .05. This assessment for a P-value indicates that the probability of being in error by assuming the existence of a significant statistical difference is less than .05 or one chance in twenty.

Applying this criterion for significance, the number of survey questions with a significant statistical difference between responses given prior and subsequent to the initiation of contacts with clients is reflected in Table 4. Results are broken down by school:

At the .05 level of significance, two of the schools each had four questions with significant statistical differences between responses given prior and subsequent to the initiation of client contacts. At the opposite end of the spectrum, two other schools each had but one question which reflected a significant statistical difference. Viewing all the Kolmogorov-Smirnov two-sample tests in combination, only 15 of the 180 individual tests indicated a significant statistical difference at the .05 level between responses given prior and subsequent to the initiation of contacts with clients.

TABLE	IV
-------	----

SCHOOL	WITH SIGNIFICANT DIFFERENCE	WITHOUT SIGNIFICANT DIFFERENCE
1	2	28
2	3	27
3	1	29
4	4	26
5	1	29
6	4	26
TOTAL	15	165

SIGNIFICANT* VS NON-SIGNIFICANT PRE-TEST/POST-TEST RESPONSE PATTERNS IN THE SIX SCHOOLS

*at .05 level

No specific statistical procedure was performed to determine an overall score, a consolidation of the 30 items, to learn whether there was a significant statistical difference between responses given prior and subsequent to the initiation of contacts with clients. It is noted, however, that no more than four of the 30 questions indicated significant differences at any school. Inasmuch as only 15 of 180 questions had significant differences, it is reasonable to assume that the study does not support the concept of significant differences between responses given by the student consultants prior and subsequent to the initiation of contacts with clients.

An acceptance of this assumption, therefore, reinforces Hypothesis 3. Research data suggest that no significant intra-school differences exist in student attitudes toward the SBI experience prior and subsequent to the initiation of contacts with clients.

Table 5 reflects by question the number of significant statistical differences between responses given both prior and subsequent to the initiation of client contacts. The statistic employed in this study was the Kolmogorov-Smirnov two-sample test. Ten of the 15 significant differences are contained in only two questions, namely questions number two and fourteen.

Summary of Research Results

At all six schools, there existed a significant difference in responses given both preceding and following the initiation of client contacts with for question number four. These data suggest that, on an overall basis, differences in response patterns relative to Hypothesis 3 are not significant. Exceptions to that pattern were significant differences in responses to questions two and 14 only. Data obtained from the two questionnaire

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TABLE V

PRE-TEST/POST-TEST RESPONSE DIFFERENCE AT THE SIX SCHOOLS

QUESTION	NUMBER OF SCHOOLS WITH SIGNIFICANT* DIFFERENCE	NUMBER OF SCHOOLS WITHOUT SIGNIFICANT DIFFERENCE
1	0	6
2	6	0
3	0	б
4	0	б
5	1	5
6	1	5
7	0	б
8	1	5
9	0	6
10	0	б
11	0	6
12	0	6
13	0	6
14	4	2
15	0	6
16	0	6
*At .05 level	0.0	

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QUESTION	NUMBER OF SCHOOLS WITH SIGNIFICANT* DIFFERENCE	NUMBER OF SCHOOLS WITHOUT SIGNIFICANT DIFFERENCE
17	0	6
18	0	б
19	0	6
20	0	6
21	1	5
22	0	б
23	0	6
24	0	6
2 5	0	б
26	0	6
27	0	6
28	0	6
29	0	6
30	1	29
OTAL	15	165

TABLE V--Continued

*At .05 level

administrations failed to provide sufficient evidence to warrant rejection of Hypothesis 3.

In summary, the null was rejected for Hypotheses 1 and 2 but not for Hypothesis 3. Significant inter-school differences were noted in perceptions held by students both preceding and following interactions with clients. This circumstance might be ascribed to one or more of the following possibilities: whether the SBI course was required or elective at the school, prior academic and professional experiences of the SBI students, aggregate professional obligations of the various faculty sponsors, and differences in human and physical resource support provided the faculty sponsors by the schools.

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CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS,

AND RECOMMENDATIONS

Summary

Growing numbers of this nation's collegiate schools of business now are exploring techniques for improving teaching efficacy. Chief among the newer patterns is field training for graduate students and selected baccalaureate candidates of upper-level standing. Perhaps the vanguard program which incorporates field training with the more traditional classroom approach is the Small Business Institute (SBI).

The SBI program is co-sponsored by participating schools of business and the Small Business Administration (SBA). The SBI program endeavors to cultivate positive interaction between the triad of the business school, the business community, and the SBA. Involvement in the SBI program enables the business school to provide a field study for its candidates, thereby supplementing the traditional in-class curricula.

This study focused on student participants of the SBI program. Specifically, the study examined the perceptions

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of several hundred student participants toward multiple aspects of the SBI experience.

The purposes of the study were to:

 measure the perceptions of student participants toward the SBI experience through utilization of a questionnaire; and

2. make available to the Small Business Administration and interested educators recommendations for possible programmatic changes, based upon perceptions reported among the student participants toward the SBI experience.

To carry out the purposes of this study, the following hypotheses were tested:

 There will be no significant inter-school perceptual differences toward the SBI experience prior to the initiation of client contacts by the student participants.

2. There will be no significant inter-school perceptual differences toward the SBI experience subsequent to the initiation of client contacts by the student participants.

3. There will be no significant intra-school perceptual differences toward the SBI experience as measured by responses provided by students both prior and subsequent to the initiation of contacts with clients.

This study utilized SBI classes at six regional collegiate schools of business. The classes consisted of a total of four hundred forty-eight students. A questionnaire relative to expectations toward the SBI course was given to each SBI enrollee within the first two weeks of a sixteenweek semester. Following the test administration, the students were immersed in SBI case work for approximately three months. Client contact at all six schools was deferred until the students responded to the questionnaire. The students, after having experienced extensive contact with their entrepreneur clients, were given a follow-up administration of the questionnaire. The two instruments essentially were identical. The basic difference was that the initial instrument presented the questionnaire items in the future tense; the follow-up instrument, past tense.

The subjects of this study were enrolled in classes for credit at the six schools. The collegians essentially were undergraduate seniors, with a sprinkling of graduates and some junior-level students.

The students were formed into teams by their respective faculty sponsors. The student teams attended classes where typically they discussed and compared case problems under the quidance of the faculty sponsors. Class discussions were designed to help identify, crystallize, and theoretically explore alternative resolutions to the various

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problems. The students later applied to "live" cases portions of the theoretical methodology presented in the class discussions.

Findings

The findings did not support the first hypothesis that there are no significant inter-school differences among student attitudes toward the SBI experience prior to the initiation of contacts with clients.

The findings did not support the second hypothesis that there will be no significant inter-school perceptual differences toward the SBI experience subsequent to the initiation of client contacts by the student participants.

The findings substantially supported the third hypothesis that there are no significant intra-school perceptual differences toward the SBI experience as measured by responses provided by student participants prior to the initiation of contacts with clients.

Conclusions

As a result of the findings of this study, the following conculsions are drawn:

 There are significant inter-school differences among student perceptions toward the SBI experience prior to the initiation of contacts with clients. 2. There exist significant inter-school differences in perceptions toward the SBI experience following the initiation of contacts with entrepreneurs by the student consultants.

3. There are not generally significant inter-school differences in perceptions toward the SBI experience as measured by responses provided by student participants both preceding and following the initiation of contacts with clients. Exceptions to the conclusions relate only to two of the thirty questionnaire items, namely questions number two and fourteen.

The two exceptional cases warrant closer scrutiny. The second item states, "I failed to help the SBI client to understand his problem(s)." Inasmuch as the difference between the pre-test and the post-test responses was positive and significant at all six of the schools (Table 5), it can be concluded that the responses provided by the student participants on the post-tests are significantly higher than the responses given on the pre-tests. This fact suggests a stronger post-test disagreement with the negatively-framed statement. The student consultants apparently felt more capable of helping the SBI clients to understand and resolve business problems than they initially had thought would be the case. The question cannot be answered conclusively on the basis of existing data.

Item number fourteen also warrants particular attention. The statement reads, "Class discussions enabled me to provide better service to my SBI Client." Inspection of Table 5 discloses that the difference between pre-test and post-test responses is positive and significant at four of the schools. The response patterns suggest that the students found class discussions less helpful than they initially had foreseen, relative to providing better service to SBI clients. Data generated from this study are inconclusive in explaining the outcome. The most obvious possibility suggests that the students' academic preparation for SBI case work exceeded their expectations for that activity, thereby rendering class discussions less crucial to effective counseling than the students initially had expected. Such a circumstance might have evolved from a screening process calculated to identify and exclude those students whose levels of academic attainments and personal attributes seemed inappropriate for the pursuit of SBI case The need for demonstrated academic preparedness is work. reinforced by the requirement that SBI enrollees must have completed successfully the core curriculum in business administration.

To suggest that the data from this research activity irrefutably establish that SBI students are scholars seems arguable. The possibility exists that class discussions were less helpful than expected in abetting efforts to resolve problems of client firms. The response pattern to question number fourteen may have resulted from an array of possible causes. If class discussions seemed inadequate from the students' perspective, the underlying reasons therefore may be traced to one or more SBI program constituents: the students themselves, the business school, the faculty sponsor, and the SBA.

Probing the matter yields these possibilities:

<u>Students</u>: The level of motivation among the students may not have been sufficiently high to generate the desired result from the consulting engagement. A large number of the student consultants may have placed higher priorities to other courses, to extracurricular activities, or gainful employment. Some of the students were forced to take the SBI course, and other students may have felt constrained to minimize travel costs, thereby potentially diluting their client effectiveness.

Business School: A preponderance of the literature suggests that business schools have done an effective job of linking student consultants with the business community, an activity shared jointly with the Small Business Administration. This research suggests that numerous positive aspects characterize the SBA-business school coalition which the SBI program uniquely provides. Warning signs surface, however, with the realization that a minority of business schools have mandated the study as a requirement for graduation. Such conscription can bring into the SBI program students who lack the necessary commitment and talent for SBI work. This may lead to a sub-optimal outcome for all constituents--the client, the reluctant SBI student, the faculty sponsor, and the business school.

Faculty Sponsor: Interviews among SBI faculty sponsors reflect a generally high level of enthusiasm for directing on-line case studies. Faculty sponsors acknowledged, however, these frequently recurring barriers: class sizes are sometimes unwieldy, the pre-enrollment screening of students may not have satisfied the standards of the faculty sponsor, or the teacher may have found low levels of administrative or clerical support.

Small Business Administration: The co-sponsoring federal agency of the SBI program has received numerous plaudits for its involvement in this field training experience for college students. Observations have surfaced, however, among students that the SBA fails to reimburse adequately the travel costs incurred in their consulting activities. At some schools, travel costs are borne in full by the students. The Small Business Administration estimates that out-of-pocket expenses related to case travel approximate \$500.00 per case to the

participating business school. The agency reimburses \$250.00 per each case which it determines the student consulting team has worked satisfactorily. The SBA might consider augmenting reimbursement payments to cover fully the costs incurred. Such a practice should help to insure a more mutually satisfactory relationship with the business school and the student consultants. An open-ended segment of the questionnaire circulated among the more than 300 student consultants elicited responses concerning the most/least liked characteristics of the SBI program as well as students' recommendations for programmatic changes. Α majority of the SBI students failed to respond to this part of the questionnaire. Most of the remaining students listed multiple most/least items when only one of each was sought. Because of (1) the general paucity of responses and, ironically, (2) the undesired multiple responses to both the most and least liked qualities of the SBI by the small pool of respondents, no meaningful conclusions could be drawn. Responses relative to needed programmatic changes in the SBI program similarly were too limited to indicate any perceptible trend.

Recommendations

Based upon the findings of this investigation, it is recommended that business schools refrain from mandating

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enrollment in the SBI course as a requirement for graduation. Greater selectivity of student entry can insure an improved consulting product. Business schools which have focused upon case volumes might appropriately reassess their positions and opt for enhanced quality of product. Moreover, business schools should consider also enlisting the participation of faculty sponsors in enrolling students who predictably would make a significant contribution to the SBI effort.

To bolster the instructional quality of the SBI program, business schools should insure that the faculty sponsor be provided a reasonable level of human resource support. Also, the various responsibilities of the faculty sponsor should not be so numerous as to seriously impair the SBI program effectiveness.

Because of the multi-faceted aspects of the role, faculty sponsors should be flexible, interactive, knowledgable both in the theory and practice of business operation, and skilled in public relations. Also useful to faculty sponsors is a high level of energy.

Prospective student consultants should be apprised that the SBI course is demanding in terms of time as well as physical and mental energy. Prospective students should assess their willingness to perform somewhat more work than is generally required in a majority of business courses.

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The SBA should seek an increased budget allocation for the SBI function. A sufficiently augmented allocation could enable the agency to require an improved consulting effort in exchange for the liberalized reimbursement.

This study explored the perceptions held toward the SBI experience by student participants from six collegiate schools of business. Appropriate implementation of the data obtained from this investigation should prove useful in subsequent efforts to strengthen SBI program quality. Essential as high quality counseling is to the success of the SBI program, other factors likewise are important. The latter include a responsiveness from the business school, an energetic, versatile SBI-faculty sponsor, and a cooperative entrepreneurial client.

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APPENDIX

5433 Van Natta Lane Fort Worth, Texas 76112 February 10, 1982

Dr. John Doe Director of Entrepreneurship Programs ABC University Our Town, U. S. A.

Dear Dr. Doe:

Thank you very much for your willingness to participate in the pre-test/post-test study concerning perceptions which SBI student consultants hold relative to the SBI experience.

Consistent with our recent discussion via telephone, I have enclosed copies of the questionnaire to be completed anonymously by each currently enrolled SBI student. An administration of this instrument prior to student-client contacts would be preferable. If this is not possible, we will be unable to include the findings of your students in this study.

Please return the executed questionnaires as quickly as possible, thus permitting an early tabulation of data. Toward the close of the semester, I will forward you a second set of questionnaires to be completed by the same body of students.

I appreciate your assistance in this research effort. Perhaps I can return your favor.

Sincerely, Villiam D.C

William S. Aston

WSA/bj Enclosures

Pre-Test Confidential Survey of Perceptions of Student Consultants Toward Small Business Institutes

Please respond to each of the following statements by circling the answer choice which best reflects your opinion. Since this is an opinion survey, there are no "right" or "wrong" answers. Answer choices are as follows: Strongly Agree (1), Agree (2), Undecided (3), Disagree (4), and Strongly Disagree (5). Also, please complete the following information:										
Sex: Male Female										
Cla:	ssification:	<u> </u>	Jr.	Sr	Gradua	te	<u> . </u>		Othe	er
Age	Range:	19-23	3	23-27	28-32		3	33 or	01de	er
Sch										
1.	The counsel especially first time.	given by the helpful to pe	e SBI ersons	student consultants s entering business f	should be or the	1	2	3	4	5
2.	I may be un problems.	able to help	the S	SBI client understand	his	1	2	3	4	5
3.	I expect to his firm.	help the SB	[c]i	ent improve the manag	ement of	1	2	3	4	5
4.	The written	SBI report	shoul	d prove helpful to th	e client.	1	2	3	4	5
5.				e probably will enabl my major field.	e me	1	2	3	4	5
6.	The group p SBI clients management	should prov	am in e hel	teraction used in cor pful in learning to w	isulting Work as a	1	2	3	4	5
7.	The consult prove pract	ing experient cically usele	ce to ss in	<pre>be included in SBI s my (present or next)</pre>	study may) job.	1	2	3	4	5
8.	SBI class d helping to	liscussions p clarify the	robab probl	ly will be of major ems of the client.	value in	1	2	3	4	5
9.	Counseling to survive.		l not	help a failing SBI t	ousiness	1	2	3	4	5
10.	The SBI cor learning ex	sulting acti perience for	vity me.	should prove to be a	a useful	1	2	3	4	5
11.	The SBI cor practical t	sulting expe business skil	rienc ls.	e may not help me to	develop	1	2	3	4	5
12.	The writter my communic	n SBI report cations skill	may d s.	lo little to help to s	sharpen	1	2	3	4	5

13.	l do not think that our SBI client really believes that we can help solve his business problems.	1	2	3	4	5
14.	Class discussions should enable me to provide better service to my SBI client.	1	2	3	4	5
15.	During the SBI course, I expect to learn much about human behavior through dealing with our client.	1	2	3	4	5
16.	I question whether an SBI client will be inclined to follow the team's suggestions.	1	2	3	4	5
17.	I like the "hands-on" approach of the SBI course.	1	2	3	4	5
18.	Student consultants should be required to perform more independent research in the SBI course than is now required.	1	2	3	4	5
19.	The decisions which we make about our SBI client's problems will likely be of questionable value because of our inexpe- rience.	1	2	3	4	5
20.	I believe that this course substantially will bridge the gap between theory and practice for the SBI consulting team.	1	2	3	4	5
21.	I believe that this course will challenge my capabilities.	1	2	3	4	5
22.	The SBI course is not a good activity to include in an academic program.	1	2	3	4	5
23.	Many students will have difficulty in communicating with the SBI client in terms that he will understand.	1	2	3	4	5
24.	My present business experience may be insufficient for SBI consulting.	1	2	3	4	5
25.	Businesses probably could profit from periodic follow- ups of SBI counseling.	1	2	3	4	5
26.	Students should be required to take a small-business course prior to the SBI consulting course.	1	2	3	4	5
27.	Students should undergo required training in human-relations aspects of conseling prior to enrolling in the SBI course.	1	2	3	4	5
28.	Owners of small businesses primarily need capital, not SBI counseling.	1	2	3	4	5
29.	The value of the SBI course may be low in relation to the work required.	1	2	3	4	5
30.	This course may be of little value to a majority of the student consultants.	1	2	3	4	5

Post-Test Confidential Survey of Perceptions of Student Consultants Toward Small Business Institutes

Check One:

I 🗍 DID 📋 DID NOT PARTICIPATE IN THE SBI PRE-TEST EARLIER THIS SEMESTER.

Please respond to each of the following statements by circling the answer choice which best reflects your opinion. Since this is an opinion survey, there are no "right" or "wrong" answers. Answer choices are as follows: Strongly Agree (1), Agree (2), Undecided (3), Disagree (4), and Strongly Disagree (5). Also, please complete the following information:

Se	ex:	Male	Female						
C1	assification:	Jr.	Sr.	Graduate				0+6	~~
Ag	e Range:	18-22	23-27	28~32		 २२	<u> </u>	01.1	
Sc	hool:					55	01	010	er
	The counsel o	liven by the SRI	student consultants i d business for the f			 :		3	4 5
2.			nt to understand his						+ 5 1 5
3.	l believe tha of his firm.	t I helped the SE	3I client to improve	the management					
4.	The written S	BI report proved	helpful to the clien	nt.					5
5.	The SBI consu gained in my	lting experience major field.	enabled me to apply	expertise					
6.	The group pro clients was h	cess or team inte elpful in learnin	raction used in cons g to work as a manag	ulting SBI					5
7.	The consulting	l experience which	h I performed in the y (present or next)		1	2	3	4	5
8.			o clarify the probler		1	2	3	4	5
9.	Counseling was business to su	an inadequate to rvive.	ool for helping a fai	iling	1	2	3	4	5
10.		ting activity cov	rved as a useful lear	ning ex-	1	2	3	4	5
					1	2	3	4	5

 The SBI consulting experience did not help me to develop practical business skills.

1 2 3 4 5

12.	The written SBI report did little to help to sharpen my communications skills.	1	2	3	4	5
13.	I do not think that our SBI client believed that we could help solve his business problems.	1	2	3	4	5
14.	Class discussions enabled me to provide better service to my SBI client.	1	2	3	4	5
15.	During the SBI course, I learned much about human behavior through dealing with our client.	1	2	3	4	5
16.	l question whether our SBI client was willing to follow the team's suggestions.	1	2	3	4	5
17.	I liked the "hands-on" approach of the SBI course.	1	2	3	4	5
18.	Student consultants should be required to perform more independent research in the SBI course than was required of our group this semester.	1	2	3	4	5
19.	The decisions which we made about our SBI client's problems were of questionable value because of our inexperience.	1	2	3	4	5
20.	I believe that this course substantially bridged the gap between theory and practice for the SBI consulting team.	1	2	3	4	5
21.	I believe that this course challenged my capabilities.	1	2	3	4	5
22.	The SBI course was not a good activity to include in an academic program.	1	2	3	4	5
23.	Many students had difficulty in communicating with the SBI client in terms that he understood.	1	2	3	4	5
24.	My present business experience was insufficient for SBI counsulting.	1	2	3	4	5
25.	Businessess can profit from periodic follow-ups of SBI counseling.	1	2	3	4	5
26.	Students should be required to take a small-business course prior to the SBI consulting course.	1	2	3	4	5
27.	Students should be required to undergo training in human- relations aspects of counseling prior to registering for the SBI course.	1	2	3	4	5
28.	Owners of small businesses primarily needed capital, not . SBI counseling.	1	2	3	4	5
29.	The value of the SBI course was low in relation to the work required.	1	2	3	4	5
30.	This course was of little value to a majority of the student consultants.	1	2	3	4	5

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