

AN ABSTRACT OF THE DISSERTATION OF

Bruce Edmund Herbert for the degree of Doctor of Philosophy in Vocational Education presented on July 16, 1992.

Title: An Assessment of Differences in Perceived Training Needs Among Entrepreneurs

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✓ Joseph F. Hlebichuk

The purpose of this study was to facilitate more effective small business management education by integrating research strands relating to entrepreneurial typologies and training needs.

A sample of 611 Oregon entrepreneurs (55.6% of those surveyed) was categorized according to an Entrepreneurial Typology Matrix. The 2x2 matrix reflected combinations of two dimensions derived from the literature: the presence or absence of a growth orientation, and whether or not entrepreneurs started their firms. Four categories resulted: 1) developers--growth-oriented entrepreneurs who started their firms; 2) builders--who are growth-oriented but acquired their businesses; 3) initiators--non-growth-oriented "starter" entrepreneurs; and 4) maintainers--who are neither growth-oriented nor "starters." Entrepreneurs rated 40 topics regarding their importance with respect to small business management training.

Five hypotheses were posed. Four related to differences in mean scores between: 1) entrepreneurial types; 2) "starters" versus "acquirers;" 3) growth-oriented versus non-growth-oriented entrepreneurs; and 4) entrepreneurs with their current firm one year or less versus those there more than one year. The fifth hypothesis

examined differences in mean scores among eight groups--with the presence or absence of previous small business ownership/management experience nested within each of the four entrepreneurial types.

Thirty-one significant differences were found among groups. No strong relationship was found between type of entrepreneur and topic means. Significance tended to be type- and topic-specific.

Five topics reflected significant differences when comparisons were made between entrepreneurial types. Starters and acquirers differed about unique aspects of family firms and characteristics of successful entrepreneurs. Eleven significant differences were found between owner/managers with versus without a growth orientation. Those in business more than one year perceived training in inventory control to be more important than did those with their firms one year or less. Seven significant differences were found among three topics when entrepreneurial type and previous experience were examined.

Five major conclusions resulted. First, certain types of entrepreneurs value training in marketing more highly than do others. Second, growth-oriented entrepreneurs perceive many topics as being more important than do those owner/managers who are not growth-oriented. Third, operational support was not found for the idea that only those starting a firm can be considered "entrepreneurs." Fourth, experienced entrepreneurs perceive mass promotion as being more important than do those without previous small business management experience. Fifth, substantive differences exist between groups about the value of training for the unique aspects of family firms.

AN ASSESSMENT OF DIFFERENCES IN
PERCEIVED TRAINING NEEDS AMONG ENTREPRENEURS

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APPROVED:

Redacted for Privacy

Associate Professor of Vocational Education in charge of major

Redacted for Privacy

Director of School of Education

Redacted for Privacy

Dean of Graduate School

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Typed by Bruce Edmund Herbert

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AN ASSESSMENT OF DIFFERENCES IN PERCEIVED TRAINING NEEDS AMONG ENTREPRENEURS

CHAPTER 1

INTRODUCTION

By integrating several research strands, this study has sought to identify the specific training needs of entrepreneurs differentiated along two dimensions: growth orientation and the act of organization creation. It has also attempted to identify differences in perceptions between those who provide such training and those who are its recipients. These data will promote more accurate development and targeting of entrepreneurship training programs.

Background of the Study

Over the past two decades, increasing attention has been paid to entrepreneurship and small business. Texts, teaching materials, and courses have proliferated. In the late 1960s, fewer than ten post-secondary institutions offered entrepreneurship/small business management courses (Vesper and McMullan, 1988); by 1979, the number had grown to 263; and by 1986, 414 colleges and universities had such offerings (Solomon and Fernald, 1991). Before 1976, only one major professional journal--the Journal of Small Business Management--was available to academics working to develop entrepreneurship theory and practice. Since 1983, eight new professional journals have been initiated (Katz, 1991). A

nationwide network of more than 600 Small Business Development Centers (SBDCs) and subcenters has been developed under the auspices of the United States Small Business Administration for the purpose of providing assistance and training to entrepreneurs.

What factors have led to increased interest in entrepreneurship and education for the management of small firms? Peter Drucker (1984) lists four major developments which have led to the rise in entrepreneurialism: 1) rapid advances in knowledge and technology, spurred by advances in computer technology, have increased the rate of major technical innovation; 2) growth in the number of two wage-earner families and well-educated adults, which has led to new products and services to serve the needs of households with adequate income but little time; 3) an improvement in the delivery system for venture capital to provide adequate capital for promising new ventures; and 4) the ability of American industry to manage entrepreneurship, leading to new products and product improvements.

The Role of Small Business

Entrepreneurs and the small firms they create and/or maintain make manifold contributions in three spheres: 1) technological; 2) economic; and 3) social.

Technological Impact. The vitality of the American economy depends on a constant stream of innovation and technological improvement. A United States Small Business Administration report (1985) noted that from 1980-85, 56% of innovations came from the small business sector--up from 48% over the period from 1945 to 1980.

Innovations can be classified into three types: 1) continuous innovations are those involving subtle modifications of products already on the market. Making toothpaste in new flavors or refrigerators with new features does not result in a radically new product, but rather a line extension or modification; 2) contiguous innovations are those which carry an already existing product or service into a new sphere. The movement from black and white to color television is an example; and 3) discontinuous innovations--the "great leap forward." These are substantially new technologies for which no ready market already exists. These products/services are like none other currently on the market, and call for a pioneering effort on the part of the inventor/entrepreneur. Much discontinuous innovation comes from small business. Small firms were instrumental in the product development and/or marketing of such discontinuous inventions as xerography, jet engines, helicopters, zip fasteners, air conditioning, and bakelite (Longenecker, 1975), as well as foam fire extinguishers, artificial skin, and quick-frozen food (Lesonsky, 1989). Of highly original inventions, more than half have originated with individuals or small firms (Longenecker, 1975).

Such frequent discontinuity is acknowledged by Bygrave (1989b), who establishes theoretical linkages with the sciences of mathematics and physics via theories of catastrophe (the jumping of systems from one stable state to another) and chaos (where tiny changes in initial conditions produce large, unexpected changes in ultimate outcomes):

"Starting a new venture is not a smooth, continuous, ordinary process. Rather, it is a disjointed, discon-

tinuous, unique event, no matter whether it is a mega- or micro-venture."

The extent of the small business role in innovation tends to vary by industrial sector. Rothwell (1984) notes that in mining machinery, textile machinery, electronic capital goods, and scientific instruments small firms tended to efficiently utilize research and development expenditures and have a substantial impact upon the market. However, in pharmaceuticals, their impact was negligible.

O. J. Krasner (1982) suggests several ways that entrepreneurship education can improve the innovation yield:

1. Innovation takes place in both small and large organizations. Educators should help students determine the type which best suits them;
2. Helping students worry about the correct elements of the entrepreneurial effort. As Krasner notes, "...successful technological entrepreneurs are not those who never worry. Rather, they are those who worry about the right things." Helping the initiator of a business venture focus on the key problems and risks at the time will facilitate the success of the firm;
3. Educators should help entrepreneurs develop their ability to maximize the value of resources. Helping the venture initiator learn to ask for the right kind of help at the right time will lead to better management decisions; and
4. Improving research efforts to improve the quality of knowledge about small business management.

Economic Impact. The material impact of small business on the economy has been well documented. These firms provide 47.9% of the jobs, and generate 38% of the nation's gross national product (U. S. Small Business Administration, Office of Advocacy, 1988). It is estimated that more than 99 percent of all businesses fit within the definition of "small business" (Hoy and Carland, 1983).

Small business has widespread support, in large part because of its importance to job creation (Jackson and Brophy, 1986). Kirchhoff and Phillips (1987), in assessing the role of entrepreneurship in economic growth, determined that from 1976 to 1984 new job creation accounted for 74.0% of employment growth. From 1970 to 1984, civilian employment in the United States increased 33.5%, as opposed to relatively small increases or slight decreases in Western Europe (Doyle and Hartle, 1985). In their article, Kirchhoff and Phillips cite the research of Armington (1986) with regard to firm entry and exit rates in the United States and the United Kingdom. Their data support her conclusion that differences in entry rates account for differences in net job creation.

Small business ownership/management often provides the only economic opportunity for those who have fallen upon hard times. As one writer comments: ". . .the forces that most commonly transform dreams and ideas into action are happenstance and desperation." (Harris, 1977). Small business comes through when times are bad; its greatest percentage contribution to job generation comes during recessionary periods (Kirchhoff and Phillips, 1987).

Basic workforce training is also an important function of small business. According to Ashmore (1989), small firms give two-thirds of Americans their first jobs.

Social Impact. The social contribution of entrepreneurship and small business is less well documented, but is worth noting. Entrepreneurs impact not only the economy, but other aspects of

society. Jack Hamilton (1980) provides a context for the contributions of this group:

"Above all, the entrepreneur is on the forefront of the times: a person who synthesizes the interests and new ideas of the age. At a time of crisis and disillusionment, the entrepreneur leads the way to economic revival and can play a major role in social reform as well."

For some, the only route to social acceptability is through entrepreneurship. Ronen (1989) asserts that "marginal men"--those on society's fringe, such as refugees, immigrants, and minorities--are so constrained that "entrepreneurial endeavors (are) almost the only feasible route." If the national goal of upward social, as well as economic, mobility is to be achieved, entrepreneurship must play a key role.

If small firms are to grow to make the desired impact on the economy, they must first stay in business. Survival--much less success--is far from assured for most small businesses. The fact that small firms have fewer resources--hence less margin for error than their larger counterparts--means that managers of small businesses must make generally good decisions if they are to grow. Peterson, Kozmetsky, and Ridgeway (1983) cite management education as facilitating required management expertise for managers of small firms.

What is a "Small Business"?

Any effort to chronicle the contributions, problems, and needs of smaller enterprises must confront a key question: Just what is a "small business?"

Widespread agreement does not exist as to what constitutes a "small business." Tate, Megginson, Scott, and Trueblood (1975) note this lack of agreement:

"There is no generally accepted definition of a "small business." The definitions vary all the way from that of the office of the Secretary of the Treasury, which includes all firms with "receipts of less than \$1 million," to ours, which is "an organization with a name, a place of operations, an owner, and one or more workers other than the owner."

Broom, Longenecker, and Moore (1983) suggest that for a business to be considered "small," it should substantially meet the following criteria:

1. Financing of the business is supplied by one individual or a small group. Only in a rare case would the business have more than 15 or 20 owners;
2. Except for its marketing function, the firm's operations are geographically localized. Typically, it operates in only one city or community;
3. Compared to the biggest firms in the industry, the business is small; and
4. The number of employees in the business is usually fewer than 100.

The Office of Advocacy of the United States Small Business Administration (1989) notes that the definition of "small business" depends on business type and industry, among other factors. It defines a small business as one having either under 500 or under 100 employees. According to the SBA:

"The definition used may depend on the policy issue or question being analyzed, or the industry being studied. An upper limit of 100 employees may be most useful in a discussion of retail stores, because most retail establishments have few employees and most retail firms have few establishments. The average entity in the industry, whether establishment or enterprise, is small, and that "smallness" is captured within a lower size

limit. In some industries, such as automobile manufacturing, the typical establishment may be much larger than 100 employees, and the "less than 500 employees" limit accurately captures the fact that a firm with 300 or 400 employees may be small relative to the industry average."

Carland and Carland (1991) extend this definition. They view a small business as "an independently owned and operated business or franchise which employs at least one full time equivalent employee and which meets the Small Business Administration requirements for financial assistance."

A Parade magazine survey (1990) notes that Wells Fargo Bank provides greater employment limitations in its definition--a business employing fewer than 50 persons.

Need for the Study

Kiesner (1984) notes a clear need for research-based program development in the area of small business management education and training. Traditional management principles and organization theories have been, often incorrectly, generalized to smaller firms (Keats and Bracker, 1988). A small business is no more a miniature large firm than a child is a miniature adult. Small firms have different needs, structures, resources, and options than "big businesses" (Dandridge, 1979). Managers of small firms deal with a wider array of problems and must allocate their time differently. Whereas executives in larger firms spend more time planning and integrating the efforts of those within the firm, small business managers spend minimal amounts of time on planning (Hope, 1982). Those in larger firms can specialize and be more focused.

The failure rate for small business is very high--especially in the formative years of the firm. Dun & Bradstreet (1981) estimates that 90% of firms fail because of poor planning, inexperience, and managerial incompetence, and that over 50,000 firms fail each year. This does not include firms which have trouble meeting their financial obligations and are forced to sell out, seek a partner, merge, or otherwise are continued in another form, or which are so small that they are never reported in the business failure records of Dun & Bradstreet. It is obvious that the early years are the most perilous time for the new small firm. Yet, only a minority of small business owners have any business training that would help them overcome the managerial incompetence that leads to business failure (Chrisman and Hoy, 1985). Training targeted at small enterprise managers can reduce the incidence of failure by providing them with knowledge and managerial tools with which to cope more effectively with complexity and change (Siropolis, 1982).

A number of research studies have shown that business failures usually stem from specific causes, and that most such failures can be prevented if managers understand them (Argenti, 1976; Clute, 1979; Sharma and Mahajan, 1980; Kibre, 1983).

The small business literature has moved in several directions. One research track has attempted to define what an "entrepreneur" is. Many authors, including McClelland (1961); Hornaday and Aboud (1971); Timmons (1978); and Welsh and White (1981) have attempted to identify characteristics shared by entrepreneurs. Realizing that there may not necessarily be "an entrepreneur," several research efforts have

sought to expand this idea by developing entrepreneurial typologies (Smith, 1967; Vesper, 1980); and by delineating the differences between entrepreneurs and small business managers (Carland, Hoy, Boulton, and Carland, 1984; Hornaday, 1990; 1991).

A related line of inquiry has involved discussions of the context in which entrepreneurship takes place. This has included studies by Leibenstein (1968); Stevenson and Gumpert (1985); Gartner (1985); and Low and MacMillan (1988).

On another front, many attempts (including Robinson, 1980; Bettencourt, 1980; Britten, 1981; Nelson, 1983; Sottrines, 1984; and Kiesner, 1984) have been made to define training needs, program characteristics, and the characteristics of potential consumers for small business management training programs.

To this point, however, no attempts have been made to amalgamate these diverse research tracks by defining training needs by entrepreneurial type. Assessing the impact of such differences provides a basis for developing more meaningful training efforts, enhancing prospects for entrepreneurial success. It is this void that this study has attempted to fill.

In order for educators to help entrepreneurs maximize their personal satisfaction and economic contribution, several questions must be answered. These include:

1. What needs to be taught?
2. Who do we need to teach it to?
3. What are the characteristics of our students?

These questions suggest the research problem, null hypotheses, and general direction for this study.

Statement of the Problem

The problem researched in this study was:

What are the training needs of selected types of entrepreneurs, how do they differ among types, and how are these needs affected by relevant entrepreneur characteristics such as length of time managing the current firm and previous small business management experience?

Purpose of the Study

The main purpose of this study is to provide information for development of small business management training programs. This information can be used to develop courses, short seminars, and other types of training programs that most efficiently and effectively meet the needs of those involved. Small business management training programs are of little value unless those at whom they are aimed acknowledge that the topics 1) are of interest to them; and 2) will help them better manage their firms.

The objective of this study was to answer the following research questions:

1. In what areas (topics) do entrepreneurs perceive a need for education and training?
2. How do the training needs vary by entrepreneurial type?
3. To what extent are these training needs affected by the following entrepreneur/manager characteristics:
 - a. the length of time the entrepreneur/manager has been in business; and
 - b. previous small business management experience.

To answer these questions, a regional sample of respondents was asked to provide basic data about themselves and their small business management experiences--both previous (if any) and with their current firms. These data included the existence of previous small business management experience; years of experience with their present firm; the degree to which the present firm provides a substantial source of personal/family income; number of employees; how their participation with their present firm began; and questions pertaining to their strategic posture as entrepreneurs. They were then asked to rate the importance of a series of management topics of concern to entrepreneurs.

Entrepreneurs were divided into four categories, derived from two relevant dimensions of entrepreneurship--innovation/growth and the creation of new organizations: 1) developers, who both initiate a new enterprise and generally demonstrate a growth orientation; 2) builders--owner/managers with growth orientations who acquire firms; 3) initiators of new firms who are not growth-oriented; and 4) maintainers--acquirers whose tendencies are toward the status quo.

Research Hypotheses

The following null hypotheses were tested in this study:

H₁: There is no significant difference among the importance ratings of topics as rated by

- H₁(a): developer versus builder entrepreneurs;
- H₁(b): developer versus initiator entrepreneurs;
- H₁(c): developer versus maintainer entrepreneurs;
- H₁(d): builder versus initiator entrepreneurs;
- H₁(e): builder versus maintainer entrepreneurs;
- H₁(f): initiator versus maintainer entrepreneurs;

- H 2: There are no significant differences in the ratings given to topics between entrepreneurs who started their own firms (developers and initiators) versus those who acquired their firms (builders and maintainers);
- H 3: There are no significant differences in the ratings given to topics between entrepreneurs who are growth-oriented (developers and builders) versus those who are not growth-oriented (initiators and maintainers);
- H 4: There are no significant differences in the ratings given to topics between entrepreneurs with one year or less small business management experience in their current firm versus those entrepreneurs with more than one year of such experience; and
- H 5: There are no significant differences in the ratings given to topics among developer, builder, initiator, and maintainer entrepreneurs who have previously owned a firm versus those who are managing their first small business.

Limitations and Delimitations

1. Only the owner/managers of ongoing firms were surveyed. Those firms which have failed and have been removed from the list of small businesses were not included, despite the fact that their opinions regarding the importance of training topics would be of great value;
2. The topics of concern to entrepreneurs were drawn from studies in the field of small business management/entrepreneurship education and other literature in that field;
3. The lists of businesses were drawn from the various State of Oregon Chambers of Commerce and the United States Small Business Administration. Firms which are not Chamber of Commerce members and those begun since the compilation of the lists were not included in the survey.

Definition of Terms

To aid in understanding this study, and clarify terms, the following definitions are used:

1. Full-time Equivalent Employee: An employee or combination of employees who work at least 35 hours per week.

2. Small Business: An independently-owned business or franchise which employs at least one full-time equivalent employee (which can include the owner) and which employs fewer than 100 people, or which hires fewer than 500 people and does not exert a major influence on the industry of which it is a part (Carland and Carland, 1991; U. S. Small Business Administration, Office of Advocacy, 1989).

3. Owner/Manager: An individual who owns at least a 50% interest in a small business; who is a full-time manager in that business; and who relies on the business for financial support.

4. High-Growth Entrepreneur: An owner/manager whose strategic posture focuses on growth, as evidenced by:

a) the introduction of:

- 1) new goods and/or services;
- 2) new methods of distribution; or
- 3) new methods of producing goods or providing services;

b) creation of new markets or the recognition of and capitalization on new markets for currently-produced products and/or services; and

c) a philosophical orientation toward growth.

5. Investor: An individual who owns less than a 50% interest in a small business and who does not rely on the business for financial support.

6. Developer Entrepreneur: A high-growth entrepreneur who initiates an original new business venture.

7. Builder Entrepreneur: A high-growth entrepreneur who purchases, inherits, or otherwise acquires a business venture.

8. Initiator Entrepreneur: A business owner/manager who initiates a new venture, does not satisfy the requirements of the "high-growth entrepreneur" definition, and who either

a) has a substantial financial involvement in the firm, and is not an investor, as evidenced by:

1) normally expecting to earn more than 50% of his/her contribution to household income, or

2) spending more than 25 hours a week involved in the operation of the firm; or

b) employs at least one full-time equivalent (FTE) employee, in addition to the owner/manager.

9. Maintainer Entrepreneur: A small business owner/manager who purchases, inherits, or otherwise acquires a business venture and who fits the definitions of neither a high-growth nor an initiator entrepreneur.

10. National Federation of Independent Business (NFIB): A national organization of small business owner/operators in retailing, wholesaling, manufacturing, and service industries.

11. Small Business Administration (SBA): A United States Government agency whose function is to provide educational/training assistance to small business owners, and occasionally provides financial support through loan guarantees to small firms.

12. Small Business Development Center (SBDC): An agency located at a community college, college, or university, which

provides information to small business. SBDCs are (usually) jointly sponsored by the educational institution and the United States Small Business Administration. These programs offer individual consulting to small firms, coordinate small- and large-group education and training programs for small firms, and serve as a local outlet for SBA literature and other management education materials.

13. Small Business Failure: A complete business discontinuation or elimination of one or more major product/service lines caused by one or more internal and/or external environmental factors.

14. Small Business Management Training: Formal educational activities provided by colleges, universities, the Small Business Administration, trade associations, or other agencies which have as a goal the improvement of knowledge and skills which facilitate success in the operation of a small business.

Summary

Small business makes significant technological, economic, and social contributions. Substantial innovation, employment growth and augmentation of GNP stem from small firms. Successful small business management thus enhances economic development.

Despite increasing interest in entrepreneurship, education for small business often fails to account for differences between small and large firms. The formal research base for development of effective entrepreneurial training programs is small. Research-based programs are needed to improve training effectiveness and help reduce failure rates for new enterprises.

This study attempts to determine the differences in importance of topics of concern among four types of entrepreneurs. It also attempts to determine the extent to which previous small enterprise management experience, length of time with the current firm, and educational attainment on the part of the entrepreneur/manager affect ratings of the importance of topics. The research questions, null hypotheses, various limitations and delimitations of the study, definitions of terms, and specific information about the role of small firms in the economy were discussed. The organization of the remainder of the study is as follows:

- Chapter 2: Related Literature -- an examination of the relevant research and opinion literature in areas related to the study;
- Chapter 3: Methods and Procedures -- an explanation of the selection of the sample, development of the survey instrument, validation processes, response-handling procedures, and data analysis;
- Chapter 4: Description of the Survey Group -- a portrayal of the sample of entrepreneurs whose responses served as the basis for the findings of the study;
- Chapter 5: Findings -- a statistical breakdown of the results of the survey, arranged on the basis of the null hypotheses listed in this chapter, and the extent to which null hypotheses are rejected or not rejected;

Chapter 6: Summary, Conclusions and Recommendations -- an analysis of the extent to which the research questions are answered and the meaning of the findings to the future of education and training in small business management and entrepreneurship; and

Chapter 7: Implications for Programs and Further Research -- a description of potential effects on program planning and suggestions for related research.

Appendices will include information sent to those surveyed, including questionnaires, letters, and other communications.

CHAPTER 2

SURVEY OF RELATED LITERATURE

Five areas of related literature were reviewed for this study. These relate to: 1) definitions of the term "entrepreneur"; 2) entrepreneurial typologies; 3) distinctions between "entrepreneurs" and small business managers; 4) success/failure factors in small business; and 5) education and training efforts for entrepreneurs and small business owner/managers.

Three types of literature were reviewed: 1) theses and other formal research studies; 2) articles by academics and practitioners of small business administration whose experiences and/or opinions indicate a substantial degree of familiarity with the subject, and who have, through their participation in the business management literature, developed some reputation as "experts" in the field; and 3) other literature, usually from non-academic books and journals.

What Is an "Entrepreneur"?

There is an increasing recognition of the importance of entrepreneurship--both within the United States and internationally. Entrepreneurs in other countries share many values (Hornaday and Knutzen, 1986), motivations (Dubini, 1989), and small business management problems (Gasse and d'Amboise, 1981) with their American counterparts.

But "What is an entrepreneur?" has been a hotly-debated question for decades. Many approaches to the definition of entrepreneurship

have been advocated, from "trait/factor" theories, which assume that possession of a certain set of traits or abilities makes one an entrepreneur, to behavioral approaches. The latter postulate that one can only tell an entrepreneur by watching what he/she does.

Using a policy Delphi with 44 academics and business leaders, Gartner (1990) identified eight themes illustrating the diversity of thought in entrepreneurship definition:

1. traits and abilities associated with the entrepreneur;
2. innovation (new ideas, products, services, or technologies;
3. behaviors involved in organization creation;
4. creation of value;
5. profit vs. nonprofit (does entrepreneurship involve only profit-making organizations?);
6. growth;
7. uniqueness (special ways of thinking, visions of accomplishment, and/or the ability to see situations in terms of unmet needs);
8. the owner-manager (activities associated with the creation, ownership, and management of an ongoing firm).

The lack of precision in the definition of entrepreneurship has resulted in a study of entrepreneurship characterized by fuzzy definitions of variables, dubious accuracy of measuring instruments, and nebulous populations studied (Bygrave, 1989a). Gartner (1990) acknowledges the multifarious, uncircumscribed nature of the field, but cautions those studying the field to be specific about its definition:

"Entrepreneurship is a very complex idea. The eight themes describe many different types of activities and states of existence. We need to be aware that when we talk about entrepreneurship we carry around a wide range

of beliefs. . . . No one definition of entrepreneurship need emerge. . . . But if no existing definition can be agreed upon by most researchers and practitioners, then it is important to say what we mean. If many different meanings for entrepreneurship exist, then it behooves us to make sure that others know what we are talking about. . . ."

In reviewing the literature pertaining to approaches to the definition of entrepreneurship, Cunningham and Lischeron (1991) identified six schools of thought: 1) the "Great Person" school; 2) the Psychological Characteristics school; 3) the Classical school; 4) the Management school; 5) the Leadership school; and 6) the Intrapreneurship school.

1. The "Great Person" School. Under this theory, some people have an innate ability to identify opportunities and make correct decisions at critical times. Those without such inborn abilities are not assumed to have the necessary intuition that means the difference between success and failure in business start-up or turnaround situations. Such business legends as Thomas J. Watson, Henry Ford, John D. Rockefeller, Steven Jobs, and Bill Gates are assumed to fit this model.

Jones (1987) offers that several characteristics seem to emerge from his experiences with entrepreneurs. He notes that they will "lay down across the wire"--doing whatever it takes to keep the company going. Determination, a tendency to overcompensate, and a keen awareness of personal and business limitations are seen as common traits.

According to Mitton (1989), "complete entrepreneurs" demonstrate specific patterns of conduct. These include: 1) an ability to see the "big picture;" 2) a knack for sensing unusual and extraordinary

elements in common situations, producing new combinations of resources and information; 3) high intensity and focus in the pursuit of goals; 4) positioning for power and control; 5) situational ethics; 6) embracing and savoring the unknown; 7) situation- and strategy-specific networking; and 8) a willingness to attract and utilize competent people. These are tied together with special knowledge and personal abilities, gained through experience, facilitating pattern recognition and awareness of cause-effect relationships leading to high levels of intuition. Mitton concludes that "(o)ver and over it is evident that some special "know-how" is a big factor in success."

2. The Psychological Characteristics School. Another means of defining entrepreneurship involves the use of psychological theories of personality.

Advocates of trait/factor theory believe that possession of certain traits, values, attitudes, and needs indicates a tendency toward entrepreneurial behavior. Needs drive behavior--in certain cases entrepreneurial behavior. Many traits, and combinations of traits, have been suggested as typifying "entrepreneurs."

Many studies have attempted to establish relationships between the existence of certain traits and the ability to successfully function as an entrepreneur. Gasse (1985) synthesizes these findings into six areas: 1) the need for achievement; 2) creativity and initiative; 3) risk-taking and the setting of objectives; 4) self-confidence and internal locus of control; 5) need for independence and autonomy; and 6) motivation, energy, and commitment.

There is a rich history of studies focusing on achievement motivation, based on McClelland's study (1961) associating the Protestant ethic, with its focus on self-reliance and the work ethic, achievement need, and entrepreneurialism. Using the Thematic Apperception Test (TAT), McClelland (1962) determined that those with high need for achievement (n Ach) tended to:

1. take personal responsibility for finding solutions to problems;
2. set moderate achievement goals and take moderate risks; and
3. desire specific, concrete feedback to assess their performance.

Johnson (1990) reviewed 23 studies developing the relationship between need for achievement and entrepreneurial behavior. He found such a relationship in 20 out of the 23 studies, and concluded that there was strong basis for inferring that need for achievement plays an important role in the concept of entrepreneurship. However, he also noted that flawed research methodology--specifically differences in the "entrepreneurs" studied and operationalizations of achievement motivation, and measurement inconsistencies in the eight different measurement constructs used in the various studies--had prevented researchers from proving the case.

Other behavioral traits hypothesized as being positively associated with entrepreneurship include a desire for power, control, and responsibility (Davids, 1963; Hornaday and Aboud, 1971; Winter, 1973; Welsh and White, 1981); a desire for independence (Davids, 1963; Hornaday and Aboud, 1971; Dunkelberg and Cooper, 1982b); creativity and an interest in "money or fame" (Hull, Bosley, and

Udell, 1980); an internal locus of control (Borland, 1974; Timmons, 1978); drive and self-confidence (Timmons, 1978; Welsh and White, 1981); a high energy level, initiative, and self-reliance (Hornaday and Bunker, 1970); and an ability to react positively to setbacks (Sexton, 1980).

The willingness to assume risk, a manifestation of one's personal goals and values, is another characteristic of this school.

The classic stereotype of the entrepreneur as a riverboat gambler who will stake his entire fortune on a figurative spin of the roulette wheel is far from reality. While a certain tendency toward risk-taking is essential to entrepreneurial activity, entrepreneurs, in fact, tend to measure risk carefully (Palmer, 1971; Timmons, 1978; Welsh and White, 1981), often being risk-transferors as opposed to risk-bearers. Brockhaus (1982) surveyed the literature relating to risk-taking by entrepreneurs and determined that entrepreneurs are only moderate risk takers. Significant variances in risk-taking propensity occur situationally among entrepreneurs based on self-image, perceptions of self-improvement prospects, and assessments of probability of goal attainment. In general, however, risk-taking does not typify entrepreneurs (Brockhaus, 1987).

McClelland (1961) observed that entrepreneurs mitigate risk by undertaking tasks in which their skills can make a difference. As Low and MacMillan (1988) conclude:

" . . . the overall evidence is that entrepreneurs are moderate risk takers and do not significantly differ from managers or even the general population. It is perhaps more insightful to view entrepreneurs as capable risk managers whose abilities defuse what others might view as high risk situations."

As with the "Great Person" theories, the Psychological Characteristics school implies that entrepreneurial behavior cannot be instilled in people; one either does or does not "have what it takes." Under these theories, entrepreneurship training programs can, at best, "fine-tune" the behaviors of those who are, innately, entrepreneurs to improve their chances of success.

Deficiencies of trait/factor and other psychological theories have been noted by many authors. Johnson's (1990) review of the literature pertaining to the Mach construct (see above) emphasizes problems encountered in research endeavors. Such problems have generally been encountered by those attempting to prove that entrepreneurs, by definition, possess certain characteristics.

3. The Classical School. The French verb "entreprendre," meaning "to undertake," provides the basis for the term "entrepreneur." The pre-20th century use of the term started with those leading military expeditions, and evolved to refer to those who initiated ventures which required elements of risk, creativity, or innovativeness.

According to the Classical school, the bearing of risk is the principal function of owners, as opposed to entrepreneurs (Schumpeter, 1934; Martin, 1982). Since Schumpeter's entrepreneurs did not have to be the investors and owners, risk-taking was not inherent in his view of this function. He described entrepreneurs as innovators whose function is to combine the means of production in new ways.

Gartner's (1985) definition of the function--the creation of new organizations--supports advocates of the Classical school.

The concept of entrepreneurship as a behavioral phenomenon with opportunity as its key element is advanced by Stevenson and Sahlman (1986). They state that "a possible situation becomes an opportunity when the results of the action are deemed desirable and feasible."

Other Classical approaches to a definition of entrepreneurship have been advanced. Leibenstein (1968) defines entrepreneurship in terms of "gap-filling" and operating more efficiently at the margin than competitors by working smarter and harder. Kirzner (1973) notes that entrepreneurs take advantage of "windows of opportunity" by exploiting market imperfections and imbalances. This perception of opportunity exploitation as the basis of the entrepreneurial function is also suggested by Stevenson, Roberts, and Grousbeck (1985).

4. The Management School. This definition of entrepreneurship emphasizes the technical aspects of initiating and developing a new venture, including the management functions of planning, organizing, staffing, directing, and controlling. The trade-off of risk for profit is also an element of the Management school.

One important aspect of this theory is that, unlike the Great Person and Psychological Characteristics schools, entrepreneurship is a learned behavior. According to Cunningham and Lischeron (1991),

" . . . entrepreneurs can be developed or trained in the classroom. Since many entrepreneurial ventures fail each year, a significant proportion of these failures might be traced to poor managing and decision making, as well as to financing and marketing weaknesses. According to this school, entrepreneurship is a series of learned activities which focus on . . . improving a person's management capability through developing his or her rational, analytic, and cause-and-effect orientation."

5. The Leadership School. This definition focuses on entrepreneurs in their role as leaders. It is assumed that, in order to achieve their goals, entrepreneurs must work through others. Thus, they must attract and motivate sufficient numbers of capable others to 1) keep their organizations alive; and 2) allow those organizations to develop.

6. The Intrapreneurship School. Innovative people who exhibit entrepreneurial tendencies sometimes exist in established organizations. To remain successful, businesses must adapt to their environments. They need to be alert to new opportunities; to change their product/service mix and/or their production methods; to "reinvent" themselves--or at least some part of themselves. Steven C. Brandt (1986) remarks that,

"Entrepreneuring . . . implies a host of desirable attributes like innovation, creativity, flexibility, and sensitivity to customers. If a company has the attributes, an important management challenge is to keep them as the enterprise grows larger and more complex. If management has let the attributes atrophy over time, a high-priority management task is to get them back . . ."

Considerable relationships exist between the Intrapreneurship school and the Management and Leadership schools. Brandt (1986) discussed intrapreneuring in terms of management functions. He also notes that small, entrepreneurial companies do not get their zest from technology or the abilities of their people, but from the ability of the leadership to make each employee a part of what is going on; motivating people through involvement and feedback.

Each different approach to defining entrepreneurship and explaining what makes an entrepreneur provides a piece of the puzzle.

However, no definition has yet been advanced which provides an operational basis for research. Low and MacMillan (1988) opine that,

"The phenomenon of entrepreneurship is intertwined with a complex set of contiguous and overlapping constructs such as management of change, innovation, technological and environmental turbulence, new product development, small business management, individualism, and industry evolution. Furthermore, the phenomenon can be productively investigated from disciplines as varied as economics, sociology, finance, history, psychology, and anthropology, each of which uses its own concepts and operates within its own terms of reference."

Developing Entrepreneurial Typologies

A more useful (and, from a research standpoint, fruitful) approach to entrepreneurship definition has been that of categorizing entrepreneurs. This approach, which sees the function in gray--as opposed to black and white--terms, has been advocated by several authors.

Vesper (1980) notes 11 categories of entrepreneurs:

1. Solo self-employed individuals work alone or with only a few employees, performing work by themselves as opposed to working through others;
2. Team builders build larger companies by hiring and delegating;
3. Independent innovators are traditional inventors who develop organizations to perform functions they do not have the expertise or time to perform on their own: developing, producing, and marketing their products;
4. Pattern multipliers are those who note an effective business strategy with room for growth, and develop organizations to do more of the same. Franchises such as McDonald's, Pizza Hut, Kentucky Fried Chicken, and Baskin-Robbins are examples of the effects of pattern multiplication;
5. Economy of scale exploiters develop businesses by expanding volume and lowering unit costs as a means of increasing profits;

6. Capital aggregators combine financing from various sources to start firms requiring substantial up-front capital (such as banks, insurance companies, and money market mutual funds which invest in government securities);

7. Acquirers purchase ongoing enterprises, continuing the firm in its present form under new management;

8. Buy-sell artists take over ongoing enterprises, rather than starting new ones. In the takeover boom of the 1980s, "corporate raiders" and other leveraged buy-out artists took over underperforming firms, instituting cost-cutting measures. The resulting firms were broken up, with the profits from the sale going to the acquirers;

9. Conglomerators aggregate businesses to try to create economies of scale and lines of complementary goods and services. In some cases, these lines of business are unrelated, as the entrepreneur pursued the benefits of "diversification.";

10. Speculators attempt to make quick profits in real estate, stocks and bonds, art, gold, or other investible commodities; and

11. Apparent value manipulators are those who present assets in a different way in order to increase the perception of their value in the eyes of others. These entrepreneurs make no substantive changes in the direction, management, or approach of the enterprise, but merely change its marketing.

Technical versus managerial/social skills provide dimensions along which entrepreneurs can be classified (Smith, 1967; Smith and Miner, 1983). Smith's (1967) "craftsman" and "opportunistic" entrepreneur typology laid the groundwork for investigations into entrepreneurial classification. "Craftsmen" are characterized as generally having less formal schooling but great expertise and skill in their narrow field. These people dislike working for others, and are given a push to start their own firm because of employment difficulties. Their limited communicative and managerial abilities restrict the growth of their ventures. "Opportunistic" entrepreneurs are those who have a more well-rounded education, learn from the people for whom they work, have a greater variety of work-related

experiences, and start a business as the fulfillment of their occupational ambitions. They are socially involved outside of the firm, and tend to be more flexible when acquiring financing. As opposed to craftsmen entrepreneurs, who see markets as fixed in size, opportunistic entrepreneurs see market expansion, not just market share, as goals of the firm.

Questions have been raised about the polarity and robustness of the craftsman vs. opportunistic entrepreneur typology (Woo, Cooper, and Dunkelberg, 1991). As classification criteria were added, members of these two groups did not remain together. The authors note that more than two categories may be necessary:

"While the craftsman-opportunist classification appears to serve as a useful dimension, its applicability and predictive capability may have been exaggerated to this point. . . . only some entrepreneurs fit the idealized "craftsman" and "opportunist" classifications."

Over 1800 small business owners were surveyed by Dunkelberg and Cooper (1982a). Factor analysis led to a three-pronged typology of entrepreneurial types. Growth-oriented entrepreneurs desired substantial growth and perceived their firms as changing rapidly. Independence-oriented entrepreneurs, like Smith's craftsmen, strongly disliked working for others and did not use written plans and control techniques. Those categorized as craftsmanship-oriented most enjoyed doing the work they were trained for, and tended to slight management concerns.

As suggested by the "Intrapreneurship" school of entrepreneurship definition, entrepreneurial typologies have been suggested which apply within established firms--though the labels and general concepts can be applied to newer and/or smaller firms.

Stevenson and Gumpert (1985), in a study of organizational characteristics facilitating entrepreneurial behavior, note two extremes with most people falling somewhere in between. Their extremes are referred to as "promoters" and "trustees." Promoters are defined as those driven by perceptions of opportunity caused by rapid changes in technology or societal values. They have a bias toward revolutionary change, often making decisions where the "windows of opportunity" are not open long. Unpredictable resource needs coupled with a lack of resource control combine to produce a lack of resource commitment and a need to draw upon the resources of others. Promoter-type managers feel confidence in their ability to avail themselves of opportunity. These people would be viewed in more traditional entrepreneurial terms.

At the other end of the spectrum, trustees are seen as classic administrators. Trustee-type managers are more bureaucratic. Their role requires them to mediate between multiple constituencies. Within organizations, their success is likely to be judged--and their compensation based--on their ability to avoid disaster and maintain the firm's target rate of return. Trustees wait until risk is reduced, often by obtaining the approval of superiors and significant rivals. Large amounts of resources are then committed to further ensure success. Since major resource commitments are made, the time horizon of such commitments tends to be quite long. These people tend to feel threatened by change and concentrate on managing existing resources (Stevenson, Roberts, and Grousbeck, 1985).

This characterization is much like that of Filley and Aldag (1978) who segment entrepreneurs into three types: craftsmen,

promoters, or administrators. Craftsmen tended to be nonadaptive, somewhat risk-averse, and focused on making a comfortable living. Promoters had higher rates of growth (especially for retailers) and aimed at exploiting a competitive advantage. Administrators, like Stevenson and Gumpert's trustee-types, tended to focus on planning and control to preserve resources, since compensation is often based on the amount and nature of resources controlled. Promoters tend toward quick action, but the durability of their commitment may not be great. The opposite tends to be true of trustee-types who tend to have longer-lasting commitments (Stevenson and Sahlman, 1986). These authors utilize the "Manager's Opportunity Matrix" to distinguish between entrepreneurs and other types of managers:

FIGURE 1
MANAGER'S OPPORTUNITY MATRIX

		Desired future state involves growth or change	
		Yes	No
Self-perceived power to achieve goals	Yes	Entrepreneur	Satisfied Manager
	No	Frustrated Potential Entrepreneur	Bureaucratic Functionary

Building on the work of Filley and Aldag (1978) and Dunkelberg and Cooper (1982b), Hornaday (1990) proposes an overlapping typology for small business owners (versus entrepreneurs) based on owners' intentions or motives. Hornaday defines three types of owners. Craft owners practice a trade, craft, or occupation. They share a

loyalty to the firm and to their career with professional managers, whose main interests lie in developing and managing organizations; and a desire for independence and personal control with promoters, whose main interest is in pursuing personal wealth. The professional managers and promoters differ from craft owners in that the former attempt to exploit innovation and growth to satisfy needs for wealth and/or ego-enhancement.

Based on responses to questions about motivations in the establishment of firms, Braden (1977) characterized 69 technical entrepreneurs as either "managerial entrepreneurs," whose firms had higher growth rates, used a greater variety of funding sources, and offered more standardized products; or as "caretaker entrepreneurs" offering more customized products and growing more slowly.

Gartner (1985) hypothesized that new venture creation is a multidimensional process. The four dimensions postulated were 1) individual (who is the entrepreneur?); 2) organizational (what do new organizations look like?); 3) environmental (what surrounds the new organization?); and 4) process (what do entrepreneurs do?). Building on this hypothesis, Gartner, Mitchell, and Vesper (1989) used cluster analysis to create a taxonomy of new business ventures. Interviews and questionnaire responses from 106 small business managers and entrepreneurs in the United States and Canada were used to collect data. Responses were factor analyzed, and eight types of new business ventures emerged:

1. Escaping to Something New. People starting these firms want to change the direction of their lives, participating in new industries and types of work, in order to gain greater monetary and nonmonetary rewards;

2. Putting the Deal Together. Entrepreneurs combining suppliers, customers, marketing channels, and other parties to create a business deal that satisfies the needs of everybody involved;

3. Roll Over Skills/Contacts. A "sideways slide" into self-employment. The initiators of this type of venture take advantage of knowledge of the industries in which they work and contacts from their previous jobs. Entrepreneurs attempt to "build a better mousetrap" through improved product design and better service;

4. Purchasing a Firm. Individuals acquiring capital and buying a firm, then attempting to improve its profitability through some mix of product and/or service changes;

5. Leveraging Expertise. Several entrepreneurs combine resources to enter a complex, highly dynamic technical environment. Established markets are entered, and the new firm attempts to profit by flexibly adapting to customer needs;

6. Aggressive Service. Individuals with substantial technical expertise and contacts aggressively market on the basis of improved service in a very specialized area;

7. Pursuing the Unique Idea. This type of firm is created to exploit a gap in the market. The product--and often the product type--is new, requiring extensive customer search;

8. Methodical Organizing. Much planning is done by individuals beginning this type of firm. Products or services are similar to those already on the market. The firm tries to profit by making minor but perceptible changes in the product or its production, or by selling to a previously untapped market niche.

Assuming that entrepreneurs are necessary to develop the embryonic small firms responsible for discontinuous innovation, and that such firms are the main engines of new job creation in the economy, it would seem to be beneficial to identify and develop potential entrepreneurs. One of the goals of studies such as those above is to focus attention on those people who have the greatest apparent chance of successfully developing businesses that will have substantial positive impacts upon the economy. Several studies have focused on differences between groups in an attempt to identify such entrepreneurs. Ronstadt (1983) sought differences between students

who started businesses and those who did not. Sexton and Bowman (1983) identified differences between students majoring in entrepreneurship and those in other majors. In a study comparing engineering students, business students, and government officials, Dandridge and Ford (1987) examined personal background, behavior patterns, and life style. Based on previous studies, the authors adjudged certain answers to be more entrepreneurial, and determined that the government group showed more entrepreneurial tendencies (though possible confounding effects were noted).

Differences Between Entrepreneurs and Small Business Managers

Not all self-employed individuals are entrepreneurial by nature or business practice. Hornaday (1990), in defending his typology of small business owners, rather than entrepreneurs, points out that many owners simply enjoy doing what they are doing--pursuing a craft, managing an organization of controlled size and limited scope, or buying, developing and selling small firms, while maintaining their independence--and have no interest in acting "entrepreneurially."

Carland, Hoy, Boulton, and Carland (1984) distinguish between entrepreneurs and owner/managers. "Entrepreneurs are defined as those who "establish and manage a business for the general purpose of profit and growth . . . characterized principally by innovative behavior and employing strategic management practices in the business." They are differentiated from small business owners who "establish and manage a business for the principal purpose of furthering personal goals; the business must be the primary source of income and will consume the majority of one's time and resources; the

owner perceives the business as an extension of his or her personality, intricately bound with family needs and desires." The authors categorized as "entrepreneurs" those whose business strategies evidenced any of the following behaviors:

1. Introduction of new goods;
2. Introduction of new methods of production;
3. Opening of new markets;
4. Industrial reorganization.

These four types of entrepreneurial behavior, along with a fifth--opening of new sources of supply--were suggested by Schumpeter (1934) and ratified by Vesper (1980) as characteristic of the entrepreneurial function.

This research built upon two other studies in which one of the authors participated. In 1982, James Carland surveyed 77 small business managers about personality characteristics, organizational structure, and strategy. A panel of judges divided the firms into entrepreneurial and small business groups, based upon three strategic behaviors. Ventures were classified as entrepreneurial if any of the following was found:

1. development and pursuit of an innovative strategic posture;
2. creation or recognition of a new market and entry into that market; and
3. recognition of and capitalization on an untapped market niche.

Only 25 of the ventures were classified as entrepreneurial. Myers-Briggs Type Indicator (MBTI) scores were compared for the two groups of ongoing firms. Entrepreneurs were found to be more

sensing, or detail-oriented. They were more thinking (task-oriented) in their information processing behavior, whereas small business managers tended to be more feeling (people-oriented). Small business owners were found to be significantly more logical and methodical in their decision-making behavior, while the entrepreneurs were more perceptive.

Seventy-three new venture founders were questioned in Hoy and Carland's 1983 study. Only 16 managers were found to be entrepreneurs from this group. MBTI scores were compared for the two groups. This time, however, no significant differences were found. Carland and Hoy concluded that segmentation of small business managers into entrepreneurial versus non-entrepreneurial groups was less a function of personality traits than of strategic behavior.

Robbins (1986) surveyed entrepreneurs, intrapreneurs, and managers to determine differences between the groups. "Entrepreneurs" were those who had started a business where none previously existed; "intrapreneurs" were those working for the firm sponsoring the study who, in the opinion of "experts" within the firm, tended to act "entrepreneurially." A random sample of 84 middle and upper level managers from the same firm were designated as "managers." The assessment instrument was an amalgam of scales from the California Psychological Inventory (CPI), Jackson Personality Inventory (JPI), Personality Research Form (PRF), Internal-External Locus of Control Scale (I-E Scale), the Strong-Campbell Interest Inventory (SCII), and the Concept Mastery Test (CMT). In comparing managers and entrepreneurs, managers were found to possess a greater

sense of well-being, according to the CPI. The JPI indicated that entrepreneurs were less conforming, but possessed a greater degree of innovativeness. Based on the SCII scales, managers tended to be investigative and conventional. In general, Robbins concluded that, from a personality standpoint, there were few differences between the two groups. Through her interviews with entrepreneurs and managers, she did note an interesting difference relating to their relative views of failure:

"Entrepreneurs were more likely to view occasional failures as part of the natural scheme of business events. Managers, on the other hand, were more likely to view failure as something which can and should be avoided."

Begley and Boyd (1987) surveyed 239 members of the Smaller Business Association of New England to examine the prevalence of five psychological attributes: need for achievement, locus of control, risk-taking propensity, tolerance of ambiguity, and Type A behavior. An "entrepreneur" was defined by the authors as someone who founded a business. Nonfounders were categorized as small business managers. Significant differences were found on three dimensions. Entrepreneurs were found to have a higher need for achievement, more tendency toward risk taking, and a greater tolerance for ambiguity. The finding with regard to Type A behavior supports the findings of Boyd and Gumpert (1983), who found no significant difference between the incidence of this type of behavior among start-up entrepreneurs and founders of established firms.

Knight (1983) compared 102 independent entrepreneurs and 105 franchisees along four dimensions: personal characteristics, management skills, financing required, and outside support services available to the two types of managers. He found that the independent entrepreneurs--those managing a small business not associated with a franchisor--came to the job with more experience, and believed this experience to be more necessary for success. They relied far less upon lawyers, bankers, accountants, and other business advisors for information. Independent entrepreneurs were also seen as being more highly motivated and independent of mind.

Duffy and Stevenson (1984) surveyed MBA graduates of an Eastern university, with 933 self-employed graduates responding. The mere fact of self-employment versus employment in a corporate environment had little impact on the extent to which managers viewed themselves as entrepreneurs.

A survey of 77 small business owners by Carland, Carland, Hoy, and Boulton (1988) assessed preference for innovation, cognitive style, need for achievement, power, and social status, with a panel of experts examining strategic actions to determine whether firms should be categorized as entrepreneurial or as small business ventures. An "entrepreneurial venture" was defined as one with principal goals of profitability and growth, and which is characterized by innovative strategic practices. "Small business ventures" were independently-owned firms that were not perceived as dominant in their field and did not engage in substantial new marketing or innovative practices. Entrepreneurs scored

significantly higher on the preference for innovation scale. Using the Myers-Briggs Type Indicator (MBTI), significant differences were found in areas of managerial style. Entrepreneurs were found to possess a thinking (as opposed to a feeling) orientation for decision making, an intuition (versus a sensation) process of information gathering and were perception-oriented (versus judgment-oriented) in dealings with people. No significant differences were found in terms of need for achievement, social status, or power.

Kahn and Manopichetwattana (1989) defined entrepreneurship in terms of innovation in their study of 50 Texas manufacturers. They did not find significant differences in locus of control or centralization and formalization of the organization among managers of innovative versus noninnovative firms.

Despite the often fuzzy boundary between entrepreneurs and small business owner/managers, the distinction is occasionally important. In a nationwide survey of over one thousand respondents, Jackson and Brophy (1986) found significantly more positive public perceptions of small business owners versus entrepreneurs. This has important implications for those initiating and promoting new ventures, especially in light of another finding from the same study. Entrepreneurs were perceived as being significantly less important than small business owners in terms of creating economic opportunity. Since economic development and job creation are two of the major rationales for public support of entrepreneurial efforts, entrepreneurs may improve their chances of receiving such support if they better publicize their successes to enhance their public image.

Success/Failure Factors in Small Business

If the innovation and job creation attributed to small businesses provide the structure for a dynamic economy, that structure is built on an unsteady foundation. As Birch (1987) points out, the small business sector is extremely volatile, having "a foundation of massive, continual failure." He estimates that as much as 52.5 percent of all small business jobs existing in 1969 were lost by 1976, with 48% of such jobs lost because of a business discontinuance. Approximately 90% of small business failures result from the owners' lack of managerial experience (Harris, 1977).

A complex interplay of factors affects the degree of small enterprise success or failure. Often, subtle distinctions mark the winning from the losing new enterprise. MacMillan, Zemann, and SubbaNarasimha (1987) identified several classes of successful ventures. In each case, a nearly identical unsuccessful venture category emerged that mirrored its successful counterpart--except for one major flaw.

Environmental, personal, and organizational considerations outline the firm and limit strategic and tactical responses. Environmental factors are generally beyond the entrepreneur's control, yet adjustments are necessitated. Longenecker and Schoen (1975) observe that while entrepreneurs are increasingly limited by government regulation, strategic adaptations remain within the independent business owner's power.

MacMillan et al. (1987) found only two major predictors of new venture success: 1) degree of competitive threat and the extent to

which the new firm is initially insulated from competition; and 2) market acceptance of the firm's product. Clute and Garman (1980) posit that government intervention to affect the business cycle, inflation and unemployment have an impact on the rate of small business failure. Reduction in the rate of increase in the money supply and in the volume of bank loans were determined to have significant adverse implications for small enterprises. While these factors stem from the external environment, strategic responses can mitigate or magnify their impact. For example, improved communication about the firm's products and prospects with potential capital sources and customers can promote market acceptance (Levin, 1991).

Small business owners in New York State expressed greatest concern over problems forced upon them and containing elements of external control. Problems relating to finances, government legislation and regulation, and bill collection/consumer credit were perceived as significantly important (Dandridge and Sewall, 1978).

Van de Ven, Hudson, and Schroeder (1984) examined 14 startup firms in the educational software industry from entrepreneurial, organizational, and ecological perspectives. Competence, confidence, imagination, and commitment differentiated successful from unsuccessful firms. These were manifested by a high educational level, previous experience in a large firm, low personal risk perceptions and a prudent approach to risk incurrence, and a broad, clear business idea. Organizationally, successful firms featured 1) cautiously incremental growth strategies; 2) decision making at the

top by a single person; 3) participative decision making which included members of both the top management team and, if present, board members; 4) longer work hours by principals; 5) more effective time management, with top managers spending a larger percentage of time contacting existing and potential customers, employees, bankers, consultants, and investors; 6) clearer goals; 7) less formal but better targeted business plans which recognize all functional areas; and 8) greater personnel stability.

These findings were largely reinforced by Duchesneau and Gartner (1990), who chronicled success and failure in the emerging fresh juice distribution industry. Additionally, the researchers found that lead entrepreneurs were more likely to have 1) entrepreneurial parents; 2) initiated--rather than purchased--their firms; 3) high capital investment levels; and 4) aggressive entry strategies and the drive to seek market expansion. Duchesneau and Gartner's findings did not agree with those of Ven de Ven et al. on the issues of locus of control and employee specialization. The former researchers determined that lead entrepreneurs of successful firms were less likely to see the success of their firm as being within their purview, while the latter group found successful entrepreneurs perceived greater control over their own destinies. Duchesneau and Gartner identified that successful ventures had more specialized employees; Van de Ven, Hudson, and Schroeder did not find any significant difference between the two groups of firms.

Citing Jovanovic's (1982) hypothesis of an inverse relationship between business age and discontinuance, Bates and Nucci (1989)

examined the small business employer subset of the Characteristics of Business Owners (CBO) database for firms in existence in 1982. They found that nearly two-thirds of the failed firms employed one to four people. In contrast, a mere 0.8% of these firms employed 50 more people. Only 3% of these larger firms ceased operations by late 1986, as opposed to 16.7% of those with 1-4 workers. The authors concluded that an inverse relationship existed between number of employees and rate of discontinuance.

Whether one is an "entrepreneur" or a "small business manager," certain conditions, behaviors, attitudes, and activities seem to enhance the chances that the small firm will develop and prosper.

Churchill and Lewis (1983) postulate the existence of eight factors which are paramount in the success or failure of the developing firm. Four of these relate to the firm itself:

1. financial resources, including borrowing power;
2. personnel resources, relating to numbers, depth, and quality of people, particularly at the management and staff levels;
3. systems resources, in terms of the degree of sophistication of both information and planning/control systems; and
4. business resources, including customer relations, market share, supplier relations, manufacturing and distribution processes, technology, and reputation, all of which give the company a position in its industry and market.

Four other factors relate to the entrepreneur/owner. According to Churchill and Lewis, the owner must have

1. goals for himself and the firm;
2. operational abilities--such as inventing, producing, or marketing a product, or managing distribution;
3. managerial abilities, including the ability to manage the activities of others and to delegate responsibility; and

4. strategic abilities for looking beyond the present and matching the strengths and weaknesses of the company with his or her goals.

Seventy-four small Canadian firms were surveyed by Ibrahim and Goodwin (1986). Using Dun & Bradstreet data and industry averages as benchmarks, firms were classified as "successful" or "unsuccessful." Fifty percent of the variance was attributed to the following personal attributes: intuition, extroversion, risk-taking proclivity; creativity; flexibility/adaptability to change; great sense of independence; and placing a high value on time. Another 40% of the variation between the two groups was due to managerial skills. These included effective management of cash flow, use of a niche strategy, pre-ownership experience, education, delegation, and employment of a simple organization structure. The remaining 10% stemmed from interpersonal skills resulting in good relations with customers, employees, and credit officers. A replication of this study was done with 70 small firms in Vermont and New York states. The above three factors were validated and a fourth, relating to environmental characteristics (interest rates, taxes, and government assistance) was suggested.

Eleven common characteristics leading to entrepreneurial success are suggested through a review of studies by Channing (1977), Baumbach (1981), and Welsh and White (1983): good health, realism, superior conceptual ability, self-confidence, a need to control or direct, attraction to challenges, sufficient emotional stability, self-control, initiative, balance and control, and enterprise (a

self-reliant attitude supported by confidence in one's ability to take risks) (Montagno, Kuratko, and Scarcella, 1986).

A sense of urgency and an objective approach to interpersonal relationships also facilitate entrepreneurial success, according to Welsh and White (1983). The authors note that,

"Entrepreneurs seem to have a never-ending sense of urgency to do something. Inactivity makes them impatient, tense, and uneasy. When in control, and especially when building their enterprises, they seem to thrive on activity and achievement."

These authors opine that, since they have little time to waste in the firm's early days, successful entrepreneurs tend to select experts, as opposed to friends, to help guide their firms. They maintain psychological distance, attending little to the feelings of others, concentrating instead on promoting individual achievement which fosters attainment of organizational goals.

Miner (1990) submits that in the early stages of the firm, successful (high-growth) entrepreneurs need a task orientation, including desires for not only achievement (a la McClelland, 1961), but also for risk avoidance, feedback, personal innovation, and planning and goal setting.

Cooper, Woo, and Dunkelberg (1988) studied nearly 3,000 individuals who had recently become small business owner/managers to determine the extent to which the owners' perceptions of success would be positively associated with the following factors, which have been shown through previous research (Hoad and Rosko, 1964; Cooper and Bruno, 1977; Dunkelberg and Cooper, 1982a) to correlate with small business success:

1. number of partners;
2. college education;
3. previous business experience;
4. prior ownership of a business;
5. prior supervisory experience;
6. customers similar to those encountered while working for their previous employer;
7. similarity of products/services as were encountered with previous employer;
8. size of prior employer; and
9. initial capital investment.

The median business owner had been in business for a year. Nearly half were retailers. Of the 3,000 owners, 64% initiated the firm (as opposed to buying an existing firm). The majority had only a few employees. No relationship was found between these predictors of success and the owner/managers' perceptions of their chances for success. Nor did those surveyed express a degree of optimism that would be justified by the historic experiences of new firms. Abelson and Levi (1985) offer an explanation of this phenomenon. Using cognitive dissonance theories, they found that decision-makers exaggerated the attractiveness of chosen options once the choice had been made. This confirmed the findings of Janis and Mann (1977) who observed that entrepreneurs expressed optimism, and developed new defensive attitudes and rationalizations as part of a process of developing greater commitment to the enterprise.

Bankers and others becoming financially involved in a business do not always ascribe the same degree of importance to various characteristics as do small business managers. In one study (Montagno, Kuratko, and Scarcella, 1986), small business

owner/managers and bankers were each asked to rank 33 dimensions or characteristics commonly believed to contribute to success. Both groups ranked oral communication and listening skills, self-motivation, determination, initiative, planning skills, and the ability to analyze problems near the top of the list. However, significant differences in perceptions were found between the two groups in 11 areas. Small business owner/managers perceived such items as confidence, caring, insight, encouragement and innovation as being more important than did the bankers. The latter put more stock in organizational and interpersonal skills, including leadership skills, organizing ability, staffing, delegation, and organizational sensitivity. Bankers also tended to more highly rate the importance of the owner/manager having an achievement orientation. This supports the finding that both entrepreneurial and small business managers manifest a high internal locus of control (Begley and Boyd, 1987), and would tend to see their destiny as being affected more by factors within their sphere of influence. Bankers tend to focus on the entire organization, and have experience with the negative effects of poor organizational practices, including lack of personnel management skill.

The presence of certain defects in the entrepreneur or the structure of the firm are almost certain to cause failure. Undercapitalization, managerial incompetence, and entrepreneurs' personality defects generally doom a new enterprise and cannot be compensated for through other means. However, even if present, these factors are not sufficient in and of themselves to ensure the firm's success (Mayer and Goldstein, 1961).

An old song lyric goes, "it's the little things that mean a lot." Failing to account for "little things" can mean the difference between success and failure. Rice (1986) offers a partial explanation for the high failure rate of small firms:

"Starry eyed MBAs, and even people with years of solid managerial experience, often ignore some of the practical realities. Or they forget about other mundane realities--such as permits, licenses, tax forms, and office supplies that someone else always looks after in a big company."

Bruno and Leidecker (1988) note that the literature on business failures leads to the following conclusions:

1. Failure is a process that occurs over time; it is not a sudden death;
2. Within failing companies, specific identifiable factors are present that cause the failure;
3. Once identified, these factors can be used to predict the propensity for failure;
4. Knowledge of the presence of these factors can lead to steps intended to avoid or prevent failure;
5. There are both external and internal factors that influence failure;
6. The external factors are those attributable to general economic effects;
7. The internal factors can be linked to the various functional areas;
8. The single most pervasive factor is poor management, which may manifest itself in a variety of ways; and

9. General failure factors may influence many businesses across a number of industries; specific failure factors affect firms in specific industries.

The "poor management" factor referred to by Bruno and Leidecker can, itself, have many root causes. One common cause is a lack of sufficient usable accounting information (Larson and Clute, 1979). Business owners in four out of five industries surveyed by Gobeli and Seville (1989) identified knowledge of, and the ability to control, costs--knowledge facilitated by effective management accounting information systems--as a critical factor in business success.

Although there are an endless number of specific causes of small business failure, these tend to fall into certain categories. Bruno, Leidecker, and Harder (1987) studied firms initiated in the San Francisco Bay Area from 1960-64 and found that 70% of those interviewed cited an inability to build an effective team--uniting a management team, employees, and outside consultants--as a major cause of business failure. Twenty percent noted that this was a minor cause. The team-building problems involved hiring relatives instead of qualified outsiders; building poor relationships with parent companies and venture capitalists; focusing on weaknesses as opposed to the managers' strengths; and employing incompetent support professionals, such as lawyers and accountants.

Other commonly cited failure causes included:

1. Product/market timing difficulties. 40% of the founders whose firms failed attributed that failure at least in some measure to product-market timing problems. Owners failed to account for the

fact that markets may not have yet existed--or may not have been sufficiently primed for the arrival of the product;

2. Product design problems. Management overestimated the ability of the firm to produce the firm's product and get it to market within cost and time constraints of the firm's resources. A too-long delayed product or production of a cheapened version caused the firm to suffer relative to competitors;

3. Inappropriate distribution/selling strategy. Firms did not match the product being sold with appropriate distribution channels. Many firms put too much reliance upon one customer--especially when that customer was a governmental entity;

4. Lack of business definition. New businesses may try to do too much, or may not adequately focus on the necessary. Firms try to overcustomize products, or fail to effectively complement products with services or vice versa;

5. Financial difficulties. More than half of the managers whose firms "discontinued" pointed to problems with lack of capitalization, taking on too much debt before the firm's sales would support it, problems with venture capitalists (such as differing goals or allowing minor points to sabotage an agreement for funding), an unworkable capital structure, or accounting problems; and

6. Personal problems. The fact that small businesses are run by human beings led to a number of problems. Getting caught up in short-term success and excitement caused some to forget about longer-term survival. (One founder stated that, "We began moving into a big fancy building and building up a big staff in anticipation

of great things happening which didn't.") Other problems included such varied difficulties and off-the-wall behaviors as status seeking, inflated egos, deceit on the part of management and/or advisors, kickbacks, dishonored verbal agreements, and undue overconfidence.

In a follow-up study, Bruno and Leidecker (1988) compared small business failures in the same geographic region among firms begun in the 1960s versus those begun in the 1980s. Ninety-six of the 250 firms begun in the 1960s had failed by 1984; Twelve founders or other key employees of failed start-ups from the 1980s were interviewed. The findings of Bruno, Leidecker, and Harder were generally borne out by the later study, as firms begun in the 1980s demonstrated many of the same characteristics as those started several decades before. Problems with undercapitalization and debt were less important. As the authors speculated, this may have had much to do with greater capital availability during the 1980s and an availability of venture capital in that region.

The key role of planning in the development of the successful small firm cannot be overstated. Robinson (1980) found that strategic planning help from outsiders made a significant difference in the profitability of the firm when owners spent substantial amounts of time on a repetitive basis with an overall function focus. He found that the gain from such help reached its zenith within 12-18 months after such help was begun, and dropped off dramatically after 18 months.

The personal factors cited by Bruno, Leidecker, and Harder can also include health considerations. The great commitment required

of the entrepreneur induces stress, which can result in business failure due to health problems. Boyd and Gumpert (1983) found that Type A (coronary-prone) behavior was demonstrated by 84% of respondents. They noted that those who do not keep their efforts in perspective may be sowing the seeds for the demise of their firm, if not themselves.

"The entrepreneur's emotional identity tends to be woven into the fabric of the company. Separating the two often becomes difficult. . . . The more business owners view the firm as an extension of themselves, however, the more vulnerable they are to anxiety and disappointment. As long as owners' identities are totally tied up in the company, the successes and problems of the business will weigh inordinately on their psyche."

Even failure, however, is a double-edged sword. David Birch points out that small business failure itself is a learning experience. In many cases, one--or more--successful firms are later developed by those who fail. One British visitor commented that in the United States, "you're not considered to be a real entrepreneur until you've been through your first bankruptcy . . ." (Richman, 1983).

Despite this upbeat viewpoint, prevention of unnecessary failure is still the rationale behind entrepreneurship education efforts.

Entrepreneurship Education Efforts

Formal education and training in small business and entrepreneurship is a relatively new phenomenon. This is especially true where programs at the high school and college levels are concerned. Hence, there is not only a shortage of programs designed in accordance with research findings, but a dearth of such findings upon which to base research.

There is a great expressed need for small business management education and training programs--not only within high school and college business programs, but in the field as well. As Philip D. Olsen (1985) notes:

"Entrepreneurial start-up efforts are a significant and growing force in our nation's economy. Along with this growth, however, is an increasing number of business failures. One probable reason for these failures is that people who start them lack pertinent entrepreneurial abilities."

Swanson (1990) remarks that, "Our shared goal is to help small business owners gain the knowledge that is necessary for them to be able to improve their operations and controls."

In response to questions about America's ability to compete internationally, Swanson (1986) comments that, "Increased education, large investments in capital equipment, and the development of new products are essential to future competitiveness."

Small business owners surveyed by Hope (1982) generally opined that some aspects of entrepreneurship can and should be learned by those attempting to run their own firms. They stressed that practical, as opposed to theoretical, information was most valuable. The extent to which information is determined to be "practical" often has much to do with the way the material is taught, however.

The U. S. Small Business Administration was, for many years, the main source of education and training for small business owner/managers. Along with a wide range of publications and short workshops on commonly-encountered management problems, the SBA has, in conjunction with community colleges and universities, established a series of Small Business Development Centers (SBDCs).

The SBDC program, with its emphasis on individual consulting, has been shown to have a positive impact on small business practices. Robinson (1980) compared 101 small firms served by the University of Georgia SBDC (48 retail; 40 service; and 13 manufacturing) with a 61-firm control group of Northwest Georgia businesses. The sample group closely paralleled the composition of United States small businesses. The researcher concluded that firms engaging in strategic planning consultations (SPC) with the SBDC showed significant improvements in sales, profitability, employment, and productivity. They were found to be more effective according to all these same measures than firms which did not utilize the SBDC for strategic planning assistance. It was also found that the more assistance received, the greater the benefit to the new firm. Strong positive correlations between pre-venture SBDC interventions and new venture success have been verified in other studies (Robinson, 1982; Robinson et al., 1984). Such assistance has also been shown to be cost effective (Chrisman et al., 1985; Gatewood, Ogden, and Hoy, 1986; Chrisman, Hoy, and Robinson, 1987).

Bettencourt (1980) surveyed 99 small business owners and 97 secondary vocational educators to determine a ranking of competencies required by such managers. Fifty-six competencies were ranked by each group. The entrepreneurs' ratings revealed that fourteen were believed to be significantly more important:

1. Ability to determine causes for failure of similar small businesses;
2. Knowledge of business law and the Uniform Commercial Code;
3. Knowledge of inventory control and turnover;

4. Ability to realistically determine personal salary;
5. Familiarity with factors involved in overhead control;
6. Ability to determine the extent of the product market;
7. Familiarity with budgeting and forecasting;
8. Ability to determine current and future trends in the product market;
9. Knowledge of low-cost advertising and mass advertising;
10. Knowledge of cost accounting;
11. Ability to interpret financial statements;
12. Mastery of skills necessary to prepare financial statements;
13. Understanding of payroll and various deductions; and
14. Familiarization with federal, state, and local taxes.

Entrepreneurs and small business managers are often thought to be self-sufficient individuals who can educate themselves. Sotrin (1984), studied 50 Kansas small business owners. He noted that as business owners exhibited a greater degree of entrepreneurial qualities, both participation in and desire for continuing education decreased.

However, many others managing such firms realize that this will not get the job done. Forty-four recipients of SBA loans in Missouri, Iowa, Nebraska, and Kansas were surveyed by Britten (1981) about their need for education in 85 competency areas. Nearly half of the respondents had at least a bachelor's degree. It was determined that the needs for learning many of the competencies could be met through educational programs.

The entrepreneur/manager group rated marketing competencies as being generally more important than those in the accounting and

financial planning realms. General management competencies scored somewhat less than those in the other three areas.

Managers rated themselves as most deficient in the areas of financial management and business planning in a study by Osborn (1980). Seminars in the areas of 1) borrowing, 2) advertising and promotion, 3) budgeting, 4) financial analysis, 5) long-range planning, 6) buying and selling a business, and 7) insurance were found to be of substantial interest to those surveyed.

A survey of Oregon entrepreneur/small business managers by Herbert (1989) reinforces the importance of training in management of resources (especially time, cash and other current assets, and employees), communication skills and conflict reduction, public relations and financial analysis skills.

Offering short courses taught by business professionals or practitioners in a university or local school district setting during the week--especially in the evenings, was preferred by small business owners (Nelson, 1983; Sotrines, 1984). Potential participants demonstrated a lack of interest if the cost for such programs was more than a nominal amount. Notification beginning about 30 days before the seminar date by direct mail, local newspaper advertisement, or through the Chamber of Commerce bulletin has been found effective in advertising such programs (Osborn, 1980; Dickson, 1983).

A study of 343 entrepreneur/managers in the Los Angeles metropolitan area supported many of the above findings about the preferred formats for courses and indicated that college work and

other training benefited managers in the operation of their businesses (Kiesner, 1984).

Differences in training needs can depend upon the stage of development of the entrepreneur's firm. Those working with start-up or early stage enterprises expressed an interest in learning more about management of growth, time management, developing banking relationships, employee and executive compensation, and personnel issues. Founders working with established small firms also tended to view growth management as being important, but showed more interest in improving their knowledge of business planning and financial management (Hutt, 1984).

Nelson (1983) surveyed small retailers in the St. Paul, Minnesota, area. She concluded that small business managers were interested in instructional programs in areas they rated as having relatively little need for, while expressing comparatively little interest in many topics perceived to be much more important. This dilemma can also be seen in Dickson's (1983) study of small business owners in Colorado. The business owners noted that major problems facing small business were headed by problems with administrative skills (management), capital, personnel, and time management. However, greatest interest was expressed in courses in the areas of self-improvement, human relations, government regulations, and developing relationships with bankers.

Small business owner/managers and entrepreneurs cannot be viewed as a homogeneous group when training programs are being developed. Age, sex, place of residence, previous life experiences, type of

business managed, topic being covered, and learning style are among the factors which influence the course coverage and format. Carlson (1981) found that several demographic variables affected ratings of importance, proficiency, and training willingness for the business areas of business analysis, accounting/recordkeeping, business decision making, store merchandising, and marketing. Carlson also found younger and less experienced owner/managers to be much more interested in small business training.

One problem that occurs in developing small business management training programs is the differing perceptions of entrepreneurs versus training agencies about what types of training are needed. Banks and Taylor (1991) asked entrepreneur/small business owners and corporate executives, as well as academics, to identify and rank-order 1) the most pressing problems facing business executives today; and 2) topics about which business managers wished to learn more. Considerable differences were found between managers' needs as viewed by academics and the ratings provided by the managers themselves. Both groups viewed strategies promoting global competition and product quality as important. However, entrepreneurs were concerned with paperwork and government regulation, attracting and motivating employees, taxes and tax laws, and work force education; academics perceived productivity, "better management," the ability to incorporate new technology, and leveraged buy-outs to be the business managers' major concerns.

These same types of discrepancies were found by Dickson (1983), who surveyed small business owner/managers and Small Business

Administration trainers. SBA professionals perceived that managers lacked management and planning skills, general business knowledge, and sufficient knowledge of accounting and finance. Managers' key concerns included general management and accounting/financial skills, but centered on personnel and time management, cost and inventory control, and marketing/consumer behavior problems. Another finding was that "the Professional (SBA) panel took a global approach while the owner/managers were more specific in their identification of problems and tended to view them with a more finite approach."

Dickson concluded that,

". . . While many of the areas or topics were identified by both groups, the (SBA and owner/manager) panels did not perceive the importance of the areas, categories, or content in the same priority. Agencies, organizations, and institutions attempting to serve the educational needs of the small business community need to recognize that their perceptions are, in some cases, different, and if they are going to attract members of the small business community, they need to present material which the potential participants believe important."

Entrepreneurship education tailored to individual firms, or at least dealing with specific topics of interest to the trainee, increases receptivity toward training. Training organizations must make potential consumers aware of the benefits of training to even very small firms, and overcome negative perceptions of such education as being vague and useless (Kirby, 1990).

Despite the claims of those who adhere to the entrepreneurial definitions of the Great Person and Psychological Characteristics schools, small business management education can make a difference. An Inc. magazine survey of its "Inc. 100," the nation's most

successful small firms, showed that 76% of the original founders are still in charge of their companies. Half had managerial experience with a Fortune 500 firm; 46% held graduate degrees in business, engineering, or law; and 39% were currently involved in continuing education for management (Gendron, 1983).

Summary

This chapter reviewed relevant literature regarding five areas relating to this study: 1) entrepreneurial definition; 2) entrepreneurial typologies; 3) distinctions between entrepreneurs and small business managers; 4) factors contributing to success and failure in small business, and 5) entrepreneurship education efforts. The four-pronged entrepreneurial typology used in this study-- developer entrepreneurs, builder entrepreneurs, initiator entrepreneurs, and maintainer entrepreneurs--rests on the theoretical foundations established in the first three of these sections. The topics that form the focal point of the study, as well as the rationale for entrepreneurship education and training efforts, are based on the final two sections.

CHAPTER 3

METHODS AND PROCEDURES

The purpose of this study was to assess the management training needs of entrepreneurs to assist those planning educational offerings aimed at those developing and managing small--and often new--enterprises. Economic development depends on the innovative capabilities and growth of small firms. If managers of such firms are to operate efficiently and effectively, spurring desired job growth, roadblocks to their success must be minimized.

This chapter describes the research methods and procedures employed in the study. It is divided into five parts: 1) a description of the population and procedures employed in sample selection; 2) development of the questionnaire; 3) typology and survey validation processes; 4) procedures involved in handling responses; and 5) statistical methods employed to analyze data generated by the completed surveys.

Population Description/Sample Selection

Oregon entrepreneurs were the focus of this study. A sampling of businesses from Oregon was utilized to obtain entrepreneurs' perceptions. Chamber of Commerce membership directories were employed as the basis of the sample. Such lists have been found to be appropriately representative of the general population of businesses in an area (Dandridge and Sewall, 1978). The following method was used to develop the sample.

1. Determine the Sample Range. Using an Oregon Tourism Division booklet, Oregon: The Official Travel Guide (1991), a list of 92 Oregon Chambers of Commerce was obtained. Letters were sent and/or phone calls made to each Chamber in order to determine its approximate membership. These individual Chamber memberships were summed to determine the number of members throughout the state. A list of Chambers, reflecting a cumulative membership range, was then produced. Numbers 1-700 were apportioned to Albany, the first chamber, based on its 700-member size; Ashland, the next Chamber, with 300 members, received numbers 701-1000, etc. This process continued throughout the Chamber list.

2. Determine Sample Size. Sample size is inextricably linked with the issue of reliability--the precision with which sample measures approximate the existence of the phenomenon under study within the actual population. As Cohen (1988) notes:

"Depending upon the statistic in question, and the specific statistical model on which the test is based, reliability may or may not be directly dependent upon the unit of measurement, the population value, and the shape of the population distribution. However, it is always dependent upon the size of the sample."

The sample size for the entrepreneur survey was determined by using the power analysis formula provided by Cohen (1988), who observes that:

"The power of a statistical test of a null hypothesis is the probability that it will lead to the rejection of the null hypothesis. . . Given the characteristics of a specific statistical test of the null hypothesis and the state of affairs in the population, the power of the test can be determined."

Cohen and Cohen (1983) note that statistical tests of null hypotheses can be viewed as a complex relationship among four factors: 1) power; 2) the rejection region (determined by the alpha level and whether the test is one- or two-tailed); 3) sample size (as n increases, so does power); and 4) effect size (the magnitude of the phenomena being studied within the population).

Using a standard power level of .80, with an effect size of .20 for a two-tailed test, it was determined that a sample size of 392 was required. This was rounded off to 400.

Mail surveys typically do not generate response rates approximating 100%. Based on the researcher's past experiences and consultations with committee members and others familiar with mail surveys, a response rate of 40% was assumed. This necessitated a tentative sample of 1,000. To compensate for undeliverable surveys, a further adjustment was warranted. The researcher's past experiences with mail surveys have shown from 5%-15% are returned unopened. On this basis, a 10% adjustment was adjudged adequate. The result was an initial mailing of 1,100 surveys.

3. Select Individual Firms. Based on the total state membership, a table of random numbers was generated by computer. This list equaled the sample size determined in Step #2 above. Each number was then allocated to the appropriate Chamber, based on its range. (For example, the first number generated was 4339. This number was within the range of the Corvallis Chamber of Commerce, which, based on its 565-member size, received slots 4301-4865.)

An effort was made to secure membership lists for all Chambers on the list for whom a random number was generated. In some cases

this was not possible. Some Chambers did not wish to share their lists; some did not reply. Therefore, additional random numbers were generated until the desired number of firms from available membership lists was determined.

Firms listed in the membership directories were then numbered to correspond with the slots on the overall membership list. Random numbers were then matched with the numbered firms in the directories, producing an actual random sample of businesses. Individual members and not-for-profit institutions were not to be included in the sample, since they did not represent profit-oriented firms. This required an additional generation of random numbers and matching of numbers with the names on the Chamber membership lists.

The distribution of surveys by Chamber is shown in Table 1 on the following page.

Development of the Questionnaire

The survey questionnaire was divided into two parts: The first part contained a series of questions designed to elicit information about the respondent's (a) level of preparedness for small business management (null hypotheses 4 and 5); and (b) managerial philosophies and practices. The latter questions were used to categorize the respondents by entrepreneurial type (null hypotheses 1, 2, and 3).

The second part of the questionnaire was used to solicit responses about the importance of topics which can be included in training programs for entrepreneurs.

TABLE 1
ALLOCATION OF SURVEYS TO OREGON CHAMBERS OF COMMERCE

Chamber	Survey Allocation	Chamber	Survey Allocation
Albany	30	McKenzie	2
Ashland	15	Milton-Freewater	8
Baker County	7	Mollala	9
Bay Area	32	Mormouth-Independ.	7
Beaverton	39	Myrtle Point	3
Bend	46	Newberg	12
Canby	11	Newport	22
Cannon Beach	6	North Clackamas	23
Coquille	5	Oakridge	6
Corvallis	29	Ontario	14
Cottage Grove	8	Oregon Tri-City	10
Creswell	1	Pendleton	20
Dallas	6	Philomath	8
Eagle Point	7	Portland	87
Eugene	67	Prineville	3
Florence	11	Redmond	22
Garibaldi	3	Rogue River	12
Grant County	2	Roseburg	42
Gresham	32	St. Helens-	3
Harney County	2	Scappoose	
Heppner	1	Salem	44
Hermiston	8	Sandy	10
Hillsboro	30	Seaside	18
Hood River	3	Sheridan	1
Illinois Valley	4	Silverton	8
Junction City-	5	Springfield	21
Harrisburg		Sunriver	3
Klamath County	19	Sweet Home	2
Lake County	7	The Dalles	38
Lake Oswego	21	Tigard	28
Lebanon	7	Tillamook	4
Lincoln City	19	Walla	1
Lower Umpqua	11	Wilsonville	15
McMinnville	18	Woodburn	12
Medford	67	Yachats	1
SURVEY TOTAL:			1,100

Determining the Entrepreneurial Type. After several decades of (largely unsuccessful) attempts to identify exactly what "an entrepreneur" is, more recent research has focused on developing entrepreneurial typologies. This has been based on the recognition that many types of people can be entrepreneurs, and that situational factors substantially impact tendencies toward entrepreneurial behavior.

The categorization scheme used in this study--developers, builders, initiators, and maintainers--is derived from this research. The typology matrix shown in Figure 2 on the following page represents permutations of the presence or absence of two major dimensions which recur throughout the entrepreneurship definition literature: an orientation toward innovation/growth and the act of establishing a business enterprise. There is much support for each.

Hornaday (1991), citing substantial historical foundations and employing fuzzy set theory, postulates three dimensions of entrepreneurship: 1) economic innovation; 2) organization creation; and 3) profit-seeking in the market sector. He notes that Schumpeter's (1934) work at the Research Center in Entrepreneurial History described entrepreneurial change in terms of breaking circular flows of equilibrium by introducing new combinations, which included activities necessary to make technological innovations commercially viable, thus providing support for the innovation/growth dimension used in the typology. Hornaday also develops the theoretical basis for organization creation, noting that, "The task of organization creation is different from the management of an existing firm . . ."

FIGURE 2
ENTREPRENEURIAL TYPOLOGY MATRIX

		Growth/Innovation	
		Yes	No
Organization Creation	Yes	Developer	Initiator
	No	Builder	Maintainer

His third characteristic is that of profit-seeking--the need for the entrepreneur to deal successfully with financial risks such as the inability to acquire necessary resources through market response to its activities. For this reason, non-profit organizations were excluded from the business sample.

The concepts of developer entrepreneur and builder entrepreneur also stem from the work of Carland, Hoy, Boulton, and Carland (1984) and Carland, Carland, Hoy, and Boulton (1988). In attempting to differentiate entrepreneurs from small business managers, the researchers categorized as "entrepreneurs" those who made major changes in the focus of their firms, evidenced by such strategies as introducing new products, selling to new markets, using new production methods, or substantially reorganizing the firm for growth. An earlier study by Carland (1982) includes as

entrepreneurs those who "develop and pursue an innovative strategic posture." Much other research (discussed in Chapter 2), starting with N. R. Smith's (1967) pioneering work which employed the dichotomous scheme of "craftsmen" versus "opportunistic" entrepreneurs, and including the study by Dunkelberg and Cooper (1982b), has established the theoretical foundation for a category of entrepreneur who is more proactive and growth-oriented. Other support for innovation/growth as key dimensions includes the work of Filley and Aldag (1978); Vesper (1980); and Stevenson and Sahlman (1986).

The other dimension employed in the typology is that of new enterprise creation. Establishing a new enterprise--of any size--is the dominant criterion in the definition of an "entrepreneur," according to Smith (1991), who notes that "the most difficult task to achieve in any business is obtaining the first customer." Samples used in several studies (Smith, 1967; Smith and Miner, 1983) have excluded any owner/manager who did not start his or her own firm. The balance of the concept of a distinct category for those starting new firms is based on the work of Begley and Boyd (1987) and Gartner (1988), who defined an "entrepreneur" as one who creates a new organization.

Hull, Bosley, and Udell's (1980) definition of "entrepreneur" supports three of the four entrepreneurial categories employed in this study. They describe the developer and initiator when referring to one who starts and manages a new venture for profit while assuming risks. They extend their definition to include those

who purchase or inherit existing businesses and have expanded or intend to expand them (demonstrating the strategic orientation toward growth that is required of those in the builder category). The work of these authors underlies the use of questions about expansion of production/marketing efforts and employment to help determine this growth orientation.

The initiator entrepreneur concept also owes much to Carland, Hoy, Boulton, and Carland (1984). To qualify as an "entrepreneur," the researchers required that business owners rely on the firm as a major source of income, spend a majority of work time managing the firm, and see it as an extension of their personality. Those not satisfying these requirements were placed in a "small business owner" division. In employing one or more individuals after starting a firm, the initiator has been responsible for job creation. The responsibility for business success thus extends beyond the immediate family, which serves to increase the manager's commitment to the firm.

Vesper's (1980) entrepreneurial typology included 11 categories, including solo self-employed individuals with at most a few employees and people who acquire ongoing enterprises, continuing the firm's form and direction at the time of acquisition. This provides the rationale for referring to the maintainers as "entrepreneurs," despite the fierce debate within the field over whether these groups should be included in the "entrepreneur" group, or cast into a distinct "owner/manager" category.

These entrepreneurs do not focus on substantial change and growth, or they would be classified as builders. They may be people

who run businesses on a part-time basis, using any profits as an income supplement. Or, they may have purchased a firm and simply wish to continue to navigate through familiar waters.

Assessing Training Needs. A number of studies (Osborn, 1980; Bettencourt, 1980; Britten, 1981; Carlson, 1981; Nelson, 1983; Dickson, 1983; Sotrines, 1984; Herbert, 1989) have focused on identifying small business management competencies. There has been some agreement on the general areas of business focus, though each study uses somewhat different terminology and involves somewhat different procedures to develop the competency lists.

Bettencourt (1980), Britten (1981), and Herbert (1989) developed their lists of competencies from an investigation of the business literature. Osborn (1980) compiled his list from an SBA survey used in the Los Angeles area and from a skills analysis of entrepreneurs developed by a nearby business professor. Carlson (1981) examined the content of SBA management training program syllabi. Panels of experts were used in several cases to add, delete, and refine competency lists. Bettencourt and Carlson each used panels of business people. Britten (1981) started with a list of 403 competencies--77 in financial planning, 69 in accounting procedures, 128 in management, and 129 in marketing. Using a small panel of experts, followed by a panel of 54 Service Corps of Retired Executives (SCORE) members, Britten weeded the competency list to the 85 most important items by taking the top 25% of competencies rated by SCORE members in each of the four major categories. Dickson (1983) utilized individual interviews with small business

owner/managers. These owner/managers either were currently or had previously been involved with management assistance and training through the SBA.

A list of small business management topics was developed by combining like items from the above-described lists and eliminating duplications. Several items in the areas of computer technology and telecommunications were added to update the list.

Discussions were then held with three people involved with the management of small firms and/or the training of small business managers. Through these discussions, further additions to and/or deletions from the list were made before a field test of the questionnaire was made. The 170 topics which resulted from this procedure are shown in Appendix 1.

To winnow the list of topics, and to test for clarity and precision of the small business management topic section, the business owner questionnaire was distributed to a convenience sample of 20 small business owner/managers located in Lincoln County and Western Lane County, Oregon. Respondents were instructed to not only rate the importance of the various items, but to note instances of unclear wording, duplicate concepts, and other problems with the instrument. When rating topics, the following scale was employed:

- 5 = Very Important
- 4 = Important
- 3 = Of Average Importance
- 2 = Relatively Unimportant
- 1 = Very Unimportant

Respondent owner/managers were engaged in the following types of businesses:

1. Confection manufacturing
2. Consumer electronics retailer/home electronics repair service
3. Dentist
4. Accounting/tax service and financial consulting
5. Retail gasoline dealer; truck rental; welding shop
6. Restaurant (dinner house)
7. Hardware/lawn & garden equipment retailer; video rental shop
8. Importer and wholesaler; gift retailing
9. Excavation/land clearing and development
10. Automobile dealer
11. Supermarket (including bakery/floral/pharmacy depts.)
12. Variety retailer
13. Floorcovering/wallcovering/countertop sales and installation; discount merchandise sales
14. Pickup canopy manufacturing
15. Nursery/garden landscaping
16. Pizza parlor
17. Furniture retailing
18. Insurance sales (former banker)
19. Resort motel with restaurant/lounge/gift sales
20. Real estate sales

Questionnaires were hand delivered, and respondents were instructed that the researcher would check back within a few days to clarify items, answer other questions, and pick up the completed survey if it was ready at that time. In most cases, respondents needed more time. Persistence on the part of the researcher resulted in a 90% response rate; only the automobile dealer and variety retailer did not complete the questionnaire. The results of the survey are shown in Appendix 1.

Based on the item ratings and comments made by respondents, the 170 topics were narrowed down to 60. Many topics were eliminated due to low scores, and other items were combined. Those items with a score of 3.75 or higher were automatically included. (This equates to 67 points or more out of a possible 90 (18 questionnaires times 5 points for the highest-level rating), the nearest point total to the 67.5 necessary for a 3.75 score.)

This 60-item topic list, along with a page of questions allowing the data to be segregated by key response groups, comprised the field-test questionnaire. This survey was distributed to a random sample of 20 small business owner/managers in Western Douglas County, Oregon. This questionnaire is shown in Appendix 2.

Test mailings were also made to a random sample of 32 firms in LaVerne, California and Ashland, Oregon to further field test the questionnaire and to determine differences in the effectiveness of two potential forms of the letter included with the initial mailing.

The item ratings from these two groups of respondents were used to once again narrow the list of topics. Of the 52 surveys distributed, three were returned as undeliverable. Twenty-seven of the remaining 49 were returned--a response rate of 55.1%. The 20 items with the lowest mean scores--corresponding to means below 3.85 out of a possible 5.00 score--were eliminated. Mean scores for the 60 topics are shown in Appendix 2.

The 40-item final questionnaire resulting from the narrowing process was given a brief final field test in Western Lane County, Oregon. This final questionnaire is shown in Appendix 3.

Validating the Typology and Questionnaire

A panel of experts was employed to establish the validity of the entrepreneurial typology and questionnaire. Seven entrepreneurship educators who have achieved national renown for their work in the areas of entrepreneurship typology development and/or entrepreneurship education and training were given definitions for three types of entrepreneurs: developers

(growth-oriented entrepreneurs); initiators (those who started their own firms, but are not growth-oriented; and successor/maintainers (those who acquire firms and are not growth-oriented), along with the study's null hypotheses. A modified Delphi method was used to synthesize the comments of panel members. After responses to the definitions, along with suggestions for modification, were received, an expanded typology and revisions of the definitions were submitted to the panel. Iterations of this process continued until panel members were in agreement as to the typology. Once the consistency of the typology had been established, this panel then reviewed the questionnaire for construct validity.

Response Handling Procedures

A checklist developed by Smith (1981) guided the preparation of the data gathering instrument and its distribution. The five-part checklist provides guidelines for general survey development, format, selection and arrangement of items, mailing and follow-up, and the cover or transmittal letter.

During the first field test, the mailing was divided. Half of the respondents received a chocolate mint and the other a small sum of money. This was done to test the effectiveness of these incentives. The small response to the mailing and the insignificant response difference between the number of mint recipients versus money recipients convinced the researcher that the substantial costs for including one or the other in the initial mailing would not be justified. The United States Postal Service also did not look upon the insertion of small items in the envelope with great

favor. Thought had also been given to including a small pencil with the mailing. The Postal Service's opposition to this idea precluded its further consideration.

The initial mailing of the survey was done during the first week of February, 1992. Respondents received the four-page survey (printed professionally on an offset press, using 11x17 paper, and folded for insertion into a #10 envelope), along with a cover letter (also folded) and a stamped, self-addressed return envelope. In order to make the presentation more visually pleasing, the questionnaire was printed on tan-colored paper, while the cover letter was printed on ivory-colored paper. All items were inserted into a #11 kraft envelope, which had also been professionally printed with the researcher's return address and an attention-getting graphic. The use of the #11 envelope provided significant time savings, because the return envelope did not require folding. The cover letter and envelope templates are both shown in Appendix 4.

A master list of randomly selected small businesses was generated. Firms received survey numbers, which were written at the top of each questionnaire sent in the initial mailing. As surveys were received, responding firms were checked off.

One month later, a follow-up mailing was prepared. A new envelope and cover letter (shown in Appendix 5) were prepared and professionally printed. This second letter was printed on a cafe-colored paper which nicely complemented the tan-colored questionnaire, drawing attention to both. This time, no survey

number was written at the top. This was done for two reasons. First, it was felt that some entrepreneurs had not responded because they perceived that the survey number allowed them to be identified, thus potentially compromising the researcher's stated claim of confidentiality. The absence of a survey number allowed them to respond with complete anonymity. The second reason was that no further follow-up mailings were planned; therefore, the additional time required to number the surveys would not have yielded any benefit which would have offset the possible nonresponse from people wishing to respond anonymously.

Data Analysis Procedures

Those surveyed received a 40-item questionnaire and were asked to rate each item on a five-point scale, with "5" corresponding to "very important;" "4" to "fairly important;" "3" to "moderately important;" "2" to "fairly unimportant;" and "1" to "very unimportant."

Respondents were partitioned into four groups corresponding to the typology. This partitioning was done by computer, based on researcher-input categorization instructions described below. These instructions were, based on the parameters of the definitions in Chapter 1. SYSTAT software, a statistical analysis program for personal computers, was used for statistical analysis. Mean scores, with 95% confidence levels, standard errors, and standard deviations were tabulated for each topic.

Categorization was based on the 22 questions asked of potential respondents in Part I of the survey. Developer Entrepreneurs were

owner/managers, as evinced by "Yes" answers to Questions 9 ("I spend more than 25 hours per week (average) managing/operating this firm.") or 10 ("I am a full-time manager of this business."); 11 ("I own 50% or more of this business, or this firm is a partnership in which I have a full and equal interest."); and 12 ("This firm provides (or is normally expected to provide) more than half of my contribution to household income.") or 13 ("I normally rely (or eventually expect to rely) on this business as an important means of financial support.").

To be considered developers, these owner/managers must also demonstrate a strategic posture focusing on growth. This was achieved by selecting statement 4b ("I am primarily interested in the growth and expansion of this business."); and having answered "Yes" to Question 15 ("I am the original owner/manager of this firm."); "Yes" to either Question 16 ("Since I started/acquired this firm, new, revenue-producing products and/or services have been introduced."), or 18 ("Since I started/acquired this firm, substantial changes in the way we produce or distribute our goods/services have occurred."); "Yes" to Question 17 ("Since I started/acquired this firm, we have begun to sell our original products/services to new customers."); and "Yes" to any one of Questions 19 ("I am planning to expand (or am in the process of expanding) our production capacity by approximately 25%."), 20 ("I am planning to increase our marketing budget by at least (approximately) 20% per year for the next two years."), or 21 ("I anticipate at least an approximately 25% increase in employment over the next two years.").

A builder entrepreneur is one who satisfies the requirements for focusing on growth, but who answered "No" to Question 15, indicating that he/she is not the initiator of an original new business venture.

Initiator entrepreneurs are those answered "Yes" to Question 15, but who do not indicate a strategic posture focusing on growth as described above. They must have a substantial financial involvement in the firm in a role other than that as an investor. Evidence of this comes from a "Yes" answer to either Question 11 or Question 12, or the employment of more than one full-time equivalent employee (from Question 2).

Those who were not developer, builder, or initiator entrepreneurs were categorized as maintainer entrepreneurs. Single-factor ANOVA (analysis of variance) was used to determine the degree to which differences existed between entrepreneurial types (Null hypotheses 1, 2, 3), and between those who had been with their current firm one year or less versus more than one year (Null hypothesis 4).

Two-factor ANOVA (analysis of variance) was used to determine significance between means for topics among the eight cells resulting when the four types of entrepreneurs were subdivided by the presence or absence of previous small firm ownership or management experience (Null hypothesis 5).

To contrast all possible mean comparisons, a Tukey's HSD (Honestly Significant Difference) test was employed. Courtney (1984) notes that "(This) procedure, "a pairwise comparisons test,

retains an error rate of only 5% when the .05 level is being utilized." Tukey's HSD is used to reduce the incidence of Type I error when multiple comparisons are being made among means (Tukey, 1949), such as is necessary when a single-factor ANOVA involves three or more means, and when multiple-factor ANOVA is employed.

This statistical analysis was also performed with SYSTAT software.

Summary

Research methods used in the conduct of this study were described in this chapter. First, the procedure for selecting the sample of Oregon small businesses was detailed. The development of the entrepreneurial typology employed and the questionnaire used to categorize entrepreneurs and obtain their opinions about training topics was discussed. The typology divided owner/managers into four groups: developer entrepreneurs, builder entrepreneurs, initiator entrepreneurs, and maintainer entrepreneurs. Based on the literature, these categories sufficiently and meaningfully differentiate on psychological, economic, and strategic dimensions. To develop and validate the typology and survey, a panel of experts consisting of nationally-renowned entrepreneurship educators was utilized.

The chapter concluded with a description of response handling and data analysis procedures.

CHAPTER 4

DESCRIPTION OF THE SURVEY GROUP

One of the major assumptions upon which parametric statistics rest is that of randomness in sample selection. In this study, 1100 questionnaires were mailed. Based on Cohen's (1988) power tables, four hundred responses were required to meet the power standards set in Chapter 3.

These expectations were exceeded. By the end of the seven-week survey period, 611 Oregon entrepreneurs (55.6% of those to whom questionnaires were mailed) had provided usable responses.

This chapter will briefly portray the sample group. Factors described include 1) length of ownership/management; 2) number of full-time equivalent employees; 3) educational background; 4) projected sales; 5) gender; 6) form of business organization; 7) previous experience; and 8) recent training participation.

Length of Ownership/Management

Several questions inquired about the respondents' firms and business background. Question 1 asked respondents, "How long have you owned/managed your present firm?" The results are shown in Table 2.

TABLE 2
LENGTH OF OWNERSHIP/MANAGEMENT

<u>Length</u>	<u>Frequency</u>	<u>Percent</u>
One Year or Less	38	6.22%
More Than One Year	573	93.78%

Of the 611 entrepreneurs replying, 38 (6.22%) owned and/or managed their business one year or less. A firm owned one year or less was determined to be a "new business" for purposes of Null Hypothesis #4. The other 573 (93.78%) had been with their present firm for more than one year.

Number of Employees

The second question sought to determine the number of full-time equivalent employees (FTE) currently employed by the entrepreneur. An "FTE" was defined as "a person or combination of people who average approximately 35 hours of work per week." The results are shown in Table 3.

TABLE 3
NUMBER OF FULL-TIME EQUIVALENT EMPLOYEES

<u>Number of FTE</u>	<u>Frequency</u>	<u>Percent</u>
None	96	15.71%
1- 20	410	67.10
21- 99	72	11.78
100-499	28	4.58
500+	3	.49
No Response	2	.33%

More than 80 percent of the sample employs 20 or fewer FTE. Thus, the group surveyed is heavily weighted in favor of very small firms.

Educational Background

Question 3 asked respondents for their level of formal education. The results are shown in Table 4.

TABLE 4
ENTREPRENEURS' EDUCATIONAL BACKGROUND

<u>Educational Level</u>	<u>Frequency</u>	<u>Percent</u>
High School Diploma or Less	97	15.88%
Some College/Post-Secondary	230	37.64
Bachelor's Degree	194	31.75
Graduate Degree	90	14.73%

In terms of formal education, those responding to this questionnaire are a well-educated lot. Nearly half (46.48%) have at least a bachelor's degree. Almost 85 percent have at least some college or post-secondary training. The number of graduate degree holders nearly equals the number with a highschool diploma or less.

Current Year's Sales

The fifth question asked respondents to forecast their firm's gross income for the current year. Table 5 shows the results.

TABLE 5
CURRENT YEAR'S PROJECTED SALES

<u>Projected Sales</u>	<u>Frequency</u>	<u>Percent</u>
Less than \$50,000	75	12.27%
\$ 50,000-\$ 99,999	56	9.17
\$100,000-\$299,999	125	20.46
\$300,000-\$499,999	80	13.09
\$500,000-\$1 Million	86	14.08
\$1 Million-\$5 Million	118	19.31
More than \$5 Million	52	8.51
No Response	19	3.11%

Firms in the sample have well-distributed projected sales. Only 21.44% of the entrepreneurs expect their firms to have less than \$100,000 in sales for the current year. Nearly half (41.90%) project \$500,000 or more, and 27.82% more than \$1 million.

Expected Future Sales Growth

Question 22 asked entrepreneurs to respond to the following statement: "I expect this firm's sales to increase AT AN ANNUAL RATE of at least (approximately) 20% per year for the next 3-5 years." Their responses are shown in Table 6.

TABLE 6
EXPECTED FUTURE SALES GROWTH

<u>20%+ Per Year Sales Growth</u>	<u>Frequency</u>	<u>Percent</u>
Yes	312	51.15%
No	293	48.03
No Response	5	.82%

Slightly more than half of the respondents believed that sales growth over the next three to five years would exceed 20% per year. This indicates at least some degree of confidence in the future of these firms.

Gender of Respondents

Table 7 shows the responses for this question.

TABLE 7
GENDER OF RESPONDENTS

<u>Gender</u>	<u>Frequency</u>	<u>Percent</u>
Male	464	75.94%
Female	143	23.40
No Response	4	.66%

This sample was heavily weighted in favor of male entrepreneurs. Four people did not state whether they were male or

female. Of the other 607 respondents, 464 (76.44%) were male and 141 (23.56%) were female.

Form of Organization

Respondents were asked to state whether their firms were organized as sole proprietorships, partnerships, corporations, or some other form. The results are shown in Table 8.

TABLE 8
FORM OF BUSINESS ORGANIZATION

<u>Organizational Form</u>	<u>Frequency</u>	<u>Percent</u>
Sole Proprietorship	200	32.73%
Partnership	59	9.66
Corporation	337	55.16
Other	9	1.47
No Response	6	.98%

As Table 8 shows, more than half of the firms were organized as corporations. The great majority of the remainder of the firms were sole proprietorships. The "Other" category included several entrepreneurs who noted that their firms were organized as Subchapter S Corporations or Not-for-Profit Corporations.

Previous Experience

The extent to which respondents had previous experience is shown in Table 9.

A little more than two-thirds (408, or 66.78%) of the 611 entrepreneurs responded "No" to Question 8, "Before owning and managing this firm, I had previously owned and managed another small business." Two hundred two (33.06%) had such experience. One did not respond to this question.

TABLE 9
PREVIOUS EXPERIENCE

<u>Previous Experience</u>	<u>Frequency</u>	<u>Percent</u>
Yes	202	33.06%
No	408	66.78
No Response	1	.16%

Recent Training Participation

Table 10 illustrates the degree to which entrepreneurs have recently participated in formal small business management training.

TABLE 10
RECENT TRAINING PARTICIPATION

<u>Training Participation</u>	<u>Frequency</u>	<u>Percent</u>
Yes	230	37.64%
No	379	62.03
No Response	2	.33%

Question 14 asked entrepreneurs if they had participated in some formal training program in the past year. Six hundred nine entrepreneurs responded to this question, with 230 (37.64%) stating "Yes," and 379 (62.03%) "No."

Summary

For this study, 1100 entrepreneurs were selected at random from the lists of 68 Oregon Chambers of Commerce. Of this number receiving a four-page questionnaire, 611 (55.6%) provided usable responses.

The sample group is dominated by first-time entrepreneurs who have owned/managed their current firm for more than one year. Their

firms are small. More than 80 percent of the sample firms employ 20 or fewer people. Projected sales are well distributed, with nearly half foreseeing \$500,000 or more in the coming year. Just over half of the entrepreneurs believe that their sales growth will equal or exceed approximately 20 percent over the next three to five years. More than half of the firms are organized as corporations, with most of the balance consisting of sole proprietorships.

Responding entrepreneurs are predominantly male and well-educated. Nearly half have at least a bachelor's degree. However, over 60 percent have not participated in formal small business management training in the past year.

Mean scores and other statistics for the 40 topics rated by this sample group will be presented in Chapter 5.

CHAPTER 5

FINDINGS

The goal of this research study was to answer three main research questions:

1. In what areas (topics) do entrepreneurs perceive a need for education and training?
2. How do the training needs vary by entrepreneurial type?
3. To what extent are these training needs affected by the following entrepreneur/manager characteristics:
 - a. the length of time the entrepreneur/manager has been in business; and
 - b. previous small business management experience?

Five hypotheses were postulated and tested. Data were analyzed by entrepreneurial type and, in accordance with one hypothesis, by subtypes.

This chapter will review and expand upon the research methods used. Data will be presented for the overall survey group and for each of the five null hypotheses.

Review of Research Methods

A random sample of 1,100 entrepreneurs, selected from the lists of 68 Oregon Chambers of Commerce, received a four-page questionnaire. The survey was divided into two parts. Part I contained 22 questions which were used to categorize entrepreneurs. In Part II, respondents were asked to rate the importance of 40

topics of possible interest to those managing small firms. The following scale was used:

- 5 = Very Important
- 4 = Important
- 3 = Of Average Importance
- 2 = Relatively Unimportant
- 1 = Very Unimportant

Based upon their responses to the questions in Part I, entrepreneurs were classified into four main categories--developers, builders, initiators, and maintainers. These categories were based on a 2x2 matrix resulting from the presence or absence of two key dimensions of entrepreneurship: growth orientation and the establishment of a new firm. These dimensions were determined by a review of the entrepreneurship literature. For one null hypothesis, a further subgrouping by previous small business ownership/management experience was required.

Of the 1,100 surveys distributed, 41 (3.7%) were undeliverable. Another 620 (56.4%) were returned. Of these, nine were unusable. Thus, 611 usable surveys (55.6%) were included in the analysis. In some cases, not all questions were answered. However, there were relatively few instances of nonresponse for individual items. Most classification questions were answered by all respondents. Of the 611 surveys, some of the 40 topics were rated by all respondents. The minimum number of responses for any topic was 595, or 97.4% of those responding. Therefore, individual nonresponse to topics was not adjudged to be a problem requiring further analysis.

SYSTAT statistical analysis software for the personal computer was used to perform t-tests and one- and two-way ANOVA tests. When

the analysis of variance indicated a significant finding, the Tukey's HSD procedure was used to test the significance of differences in subgroup means. Since Tukey's HSD requires equal cell counts, a requirement not fulfilled by the data generated in this study, an additional adjustment was required. If a Tukey's test is requested when unequal n's are present, SYSTAT automatically performs a procedure employing a harmonic mean n . This procedure is known as the Tukey-Kramer Adjustment.

For the first four null hypotheses, small numbers of groups were compared. In order to further protect against determining significance where none exists, the Bonferroni pairwise comparison procedure was used when four or fewer groups were compared. Bonferroni is often more sensitive than Tukey's HSD for small numbers of comparisons (Wilkinson, 1990).

To test for late response bias, an ANOVA was performed on early versus late respondents. A "late" respondent was one whose survey arrived more than two days after the follow-up mailing date. Only Topics 8, 21, 29, and 30 showed significant differences.

Topic Ratings--All Entrepreneurs

Means, standard deviations, standard errors, and the number of respondents rating each of the 40 topics are shown in Table 11. Ratings represent the views of the entire sample of entrepreneurs.

Topic 12 ("The customer service function--developing customer relations") received the highest overall importance rating. Other topics receiving a rating of at least 4.00 by the entire sample (which corresponds to "Important" on the rating scale) involved

TABLE 11:
MEANS, STANDARD DEVIATIONS, AND STANDARD ERRORS FOR TOPICS (ALL ENTREPRENEURS)
(INCLUDES T-TESTS ON ADJACENT MEANS)

<u>Topic Number</u>	<u>Topic</u>	<u>Mean</u>	<u>SD</u>	<u>SE</u>	<u>N</u>	<u>t</u>	<u>DF</u>	<u>p</u>
12	The customer service function	4.513	.761	.031	608			
						.491	592	.623
1	Motivating employees	4.500	.910	.037	596			
						2.963	595	.003
2	Recordkeeping requirements	4.362	.817	.033	611			
						2.471	603	.014
4	Social responsibility/ business ethics	4.268	.868	.035	604			
						.449	601	.654
10	Cash management: cash flow principles; cash budgeting/forecasting	4.245	.879	.036	607			
						2.478	604	.014
9	Problem solving/decision making techniques	4.152	.846	.034	607			
						1.331	604	.184
15	Cash management: working capital requirements	4.105	.922	.037	607			
						1.381	604	.168
5	Developing marketing plans/strategies	4.044	.910	.037	607			
						.656	601	.512
32	Communications skills	4.008	1.007	.041	606			
						.086	602	.931
3	Merchandise layout	4.002	1.143	.046	608			

(Table 11, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Mean</u>	<u>SD</u>	<u>SE</u>	<u>N</u>	<u>t</u>	<u>DF</u>	<u>p</u>
3	Merchandise layout	4.002	1.143	.046	608			
						.171	602	.864
34	Team building skills	3.990	1.027	.042	606			
						.538	601	.590
23	Goal setting: planning/ forecasting/budgeting	3.970	.942	.038	607			
						.561	605	.575
8	Understanding/interpreting financial statements	3.949	.943	.038	608			
						.389	599	.697
13	Reasons for small business success/failure	3.937	1.078	.044	601			
						.361	599	.718
25	Pricing	3.920	1.020	.041	610			
						.507	604	.613
16	Public relations	3.888	.988	.040	606			
						1.102	599	.271
7	Evaluation of employees	3.836	1.028	.042	603			
						.671	599	.503
24	Personal characteristics of successful entrepreneurs	3.812	1.093	.044	606			
						.394	603	.694
33	Designing/maintaining the accounting system	3.801	1.043	.042	609			
						.814	604	.416
17	Coping with change/ uncertainty/ambiguity	3.759	.960	.039	607			

(Table 11, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Mean</u>	<u>SD</u>	<u>SE</u>	<u>N</u>	<u>t</u>	<u>DF</u>	<u>p</u>
17	Coping with change/ uncertainty/ambiguity	3.759	.960	.039	607			
						.107	604	.915
14	Self-image building	3.759	1.137	.046	607			
						.000	603	1.000
6	Basic economic principles	3.757	.973	.040	606			
						.395	602	.693
39	Training and development for employees	3.742	1.060	.043	608			
						.067	607	.947
28	Personal selling techniques	3.742	1.099	.045	609			
						1.081	606	.280
40	Safety standards/practices	3.679	1.149	.047	607			
						.616	603	.538
31	Hiring practices/requirements	3.657	1.078	.044	606			
						.067	593	.947
11	Problems/operating strategies for specific business types	3.644	1.024	.042	595			
						.235	594	.815
29	Payrolls: Wage and salary administration	3.637	1.044	.042	609			
						1.439	605	.151
30	Payrolls: preparation/tax and benefit laws	3.594	1.140	.046	606			
						1.268	602	.205
27	Advertising campaigns	3.521	1.022	.041	608			
						.674	606	.500
26	Periodic reviews of the org.	3.495	.933	.038	610			

(Table 11, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Mean</u>	<u>SD</u>	<u>SE</u>	<u>N</u>	<u>t</u>	<u>DF</u>	<u>p</u>
26	Periodic reviews of the org.	3.495	.933	.038	610			
35	Calculating/understanding financial ratios	3.489	1.143	.046	609	.181	607	.856
22	Basic purchasing principles/ practices	3.481	1.102	.045	609	.135	606	.893
18	Consumerism--trends/principles	3.456	1.002	.041	607	.479	606	.632
36	Inventory control principles	3.458	1.179	.048	609	.032	604	.975
19	Unique aspects of family firms	3.377	1.228	.050	600	1.135	599	.257
21	Role/importance of small business	3.359	1.277	.052	607	.607	597	.544
38	Choosing form of ownership	3.342	1.209	.049	608	.185	603	.854
37	Determining/planning physical facilities	3.317	1.154	.047	606	.580	604	.562
20	Security issues	3.280	1.187	.048	607	.840	601	.401

employee motivation, recordkeeping requirements, social responsibility and business ethics, cash management, problem solving/decision making techniques, marketing plans and strategies, merchandise layout, and communications skills. The lowest-rated topics related to aspects of family firms, the role and importance of small business, form of ownership, determining and planning physical facilities, and security. These topics all had means of less than 3.50.

Dependent t-tests conducted on adjacent means indicate that Oregon entrepreneurs perceive Topics 12 and 1 to be significantly more important than other topics. The mean for Topic 2 was significantly higher than those for topics other than Topics 12 and 1. The top five topics (relating to customer service, employee motivation, recordkeeping, social responsibility/business ethics, and management of cash flow/cash budgeting) had significantly higher means than the other 35. The results of this analysis are included in Table 11.

These tests revealed no significant differences between adjacent means for the other 35 topics.

Hypothesis #1: Differences Among the Four Types

The first null hypothesis tested in this study was:

H₀ 1: There is no significant difference among the importance ratings of topics as rated by

- H₀ 1(a): developer versus builder entrepreneurs;
- H₀ 1(b): developer versus initiator entrepreneurs;
- H₀ 1(c): developer versus maintainer entrepreneurs;
- H₀ 1(d): builder versus initiator entrepreneurs;
- H₀ 1(e): builder versus maintainer entrepreneurs;
- H₀ 1(f): initiator versus maintainer entrepreneurs;

Number/Percentage of Respondents (N). Figure 3, the Entrepreneurial Typology Matrix, shows the number and percentage of respondents for each major entrepreneurial category (developer, builder, initiator, and maintainer). The initiator and maintainer categories are more heavily populated. They represent the owner/

FIGURE 3

ENTREPRENEURIAL TYPOLOGY MATRIX REVISITED:
NUMBER/PERCENTAGE OF RESPONDENTS BY ENTREPRENEUR TYPE

		Growth/Innovation	
		Yes	No
Organization Creation	Yes	Developer N = 91 (14.9%)	Initiator N = 216 (35.4%)
	No	Builder N = 47 (7.7%)	Maintainer N = 257 (42.1%)

managers who are not growth oriented. The "builder" category--entrepreneurs who are growth-oriented but did not start their own firms--is the smallest with 47 members. The number of responses varies slightly by topic since not all topics were rated by all respondents. For developers, topic responses ranged from 88 to 91; for builders, from 45 to 47; for initiators, from 211 to 216; and for maintainers, from 248 to 257. Given the relatively large number of respondents, the incidence of nonresponse to individual topics,

and its effect on overall topic means is minimal. The number of respondents to individual topics can be found in Appendix 6.

A Chi-Square test conducted on the cell populations in Figure 3 showed significance beyond the .001 level (Chi-Square value of 195.51; three degrees of freedom (DF)). Non-growth-oriented entrepreneurs appeared to dominate in Oregon. To verify this, a second Chi-Square test was conducted on the two cells representing growth-oriented entrepreneurs versus the two representing non-growth entrepreneurs. A value of 183.67 with one DF was significant beyond the .001 level. The assumption about the apparent dominance of non-growth-oriented entrepreneurs in Oregon was confirmed.

Topic Ratings By Entrepreneurial Type. A breakdown of mean scores for the 40 topics by type of entrepreneur is shown in Table 12, along with F-scores and probabilities of F for each topic. Tables A.1-A.4 in Appendix 6 show topics ranked by means for the four types, standard errors, and number of respondents by topic.

Topic 12 (Customer service) showed the highest mean score for both developers and initiators (original owner/managers of firms). It was second highest-rated among builders and maintainers (who acquired firms). Topic 10 (Cash management: cash flow principles, etc.) earned the builders' highest mean score. Among maintainers, Topic 1 ("Motivating employees") ranked first. All four types of entrepreneurs rated these three topics among their top five.

Only seven topics received mean scores of 4.00 for all four entrepreneurial groups. These are listed in Table 13.

Six additional hypotheses were posed to compare the four entrepreneurial types--developers, builders, initiators, and

TABLE 12
MEAN SCORES AND F-RATIOS FOR ALL TOPICS BY TYPE OF ENTREPRENEUR

<u>Topic Number</u>	<u>Topic</u>	<u>Develop.</u>	<u>Build.</u>	<u>Init.</u>	<u>Maint.</u>	<u>F</u>	<u>p</u>
1	Motivating employees	4.500	4.378	4.434	4.578	1.258	.288
2	Recordkeeping requirements	4.473	4.383	4.394	4.292	1.307	.271
3	Merchandise layout	3.900	4.085	3.963	4.055	.586	.624
4	Social responsibility/ business ethics	4.209	4.178	4.362	4.227	1.314	.269
5	Developing marketing plans/strategies	4.275	4.304	3.883	4.051	5.561	.001
6	Basic economic principles	3.791	3.894	3.779	3.702	.654	.581
7	Evaluation of employees	3.742	3.872	3.813	3.881	.468	.704
8	Understanding/interpreting financial statements	3.978	4.128	3.855	3.984	1.422	.235
9	Problem solving/decision making techniques	4.278	4.174	4.121	4.128	.831	.477
10	Cash management: cash flow principles; cash budgeting/forecasting	4.311	4.553	4.164	4.234	2.743	.042

(Table 12, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Develop.</u>	<u>Build.</u>	<u>Init.</u>	<u>Maint.</u>	<u>F</u>	<u>p</u>
11	Problems/operating strategies for specific business types	3.852	3.851	3.623	3.548	2.629	.049
12	The customer service function	4.538	4.489	4.491	4.527	.140	.936
13	Reasons for small business success/failure	3.978	4.064	4.014	3.834	1.393	.244
14	Self-image building	3.835	3.809	3.826	3.668	.962	.410
15	Cash management: working capital requirements	4.209	4.370	4.079	4.043	2.099	.099
16	Public relations	3.956	4.106	3.849	3.855	1.113	.343
17	Coping with change/ uncertainty/ambiguity	3.833	3.787	3.762	3.727	.290	.833
18	Consumerism--trends/principles	3.495	3.660	3.432	3.426	.809	.489
19	Unique aspects of family firms	3.578	3.638	3.526	3.131	6.073	.000
20	Security issues	3.253	3.489	3.272	3.258	.535	.659
21	Role/importance of small business	3.407	3.617	3.432	3.234	1.733	.159

(Table 12, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Develop.</u>	<u>Build.</u>	<u>Init.</u>	<u>Maint.</u>	<u>F</u>	<u>p</u>
22	Basic purchasing principles/ practices	3.495	3.511	3.500	3.455	.084	.969
23	Goal setting: planning/ forecasting/budgeting	4.143	4.106	3.920	3.926	1.744	.157
24	Personal characteristics of successful entrepreneurs	3.865	3.872	3.921	3.691	1.869	.134
25	Pricing	4.011	3.872	3.907	3.906	.301	.824
26	Periodic reviews of the organization	3.495	3.766	3.474	3.463	1.459	.225
27	Advertising campaigns	3.753	3.596	3.500	3.445	2.121	.096
28	Personal selling techniques	4.022	3.936	3.698	3.645	3.281	.021
29	Payrolls: wage and salary administration	3.633	3.723	3.581	3.669	.392	.759
30	Payrolls: preparation/tax and benefit laws	3.700	3.723	3.549	3.570	.606	.611
31	Hiring practices/requirements	3.843	3.830	3.535	3.663	2.220	.085
32	Communications skills	4.110	3.915	4.000	3.996	.460	.710

(Table 12, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Develop.</u>	<u>Build.</u>	<u>Init.</u>	<u>Maint.</u>	<u>F</u>	<u>p</u>
33	Designing/maintaining the accounting system	3.846	4.021	3.856	3.698	1.796	.147
34	Team building skills	4.011	4.000	3.958	4.008	.108	.955
35	Calculating/understanding financial ratios	3.560	3.596	3.433	3.492	.429	.732
36	Inventory control principles	3.352	3.617	3.391	3.523	1.028	.380
37	Determining/planning physical facilities	3.231	3.489	3.311	3.320	.520	.668
38	Choosing form of ownership	3.451	3.787	3.391	3.180	4.067	.007
39	Training and development for employees	3.989	3.766	3.656	3.723	2.148	.093
40	Safety standards/practices	3.600	3.809	3.600	3.749	.995	.395

TABLE 13
TOPICS RECEIVING MEAN SCORES OF 4.00 OR HIGHER
(FOR ALL ENTREPRENEURIAL TYPES)

<u>Topic Number</u>	<u>Topic</u>
1	Motivating employees
2	Recordkeeping requirements
4	Social responsibility/business ethics
9	Problem solving/decision making techniques
10	Cash management: cash flow principles; cash budgeting/forecasting
12	The customer service function
15	Cash management: figuring working capital requirements

maintainers. Significant differences were found among the types for five of the topics in the survey. These were Topics 5, 10, 19, 28, and 38. Two of these topics (5 and 19) showed significant differences for more than one comparison.

Hypothesis 1.1. The first subhypothesis of H_0 tested was:

$H_0(a)$: There is no significant difference among the importance ratings of topics as rated by developer versus builder entrepreneurs.

The Tukey's HSD multiple comparison test for significant differences among entrepreneurial group means for the four types did not reveal any differences between developer and builder entrepreneurs.

The null hypothesis is not rejected for any topic between these groups.

Hypothesis 1.2. The second subhypothesis of H_0 tested was:

$H_0(b)$: There is no significant difference among the importance ratings of topics as rated by developer versus initiator entrepreneurs.

Based on paired comparison tests, significance was determined for one topic: Topic 5 (Developing marketing plans/strategies). The matrix of pairwise comparison probabilities is shown in Table 14.

TABLE 14
PAIRED COMPARISON PROBABILITIES -- TOPIC 5

	<u>Developers</u>	<u>Builders</u>	<u>Initiators</u>	<u>Maintainers</u>
Developers	-----			
Builders	.998	-----		
Initiators	.003**	.021*	-----	
Maintainers	.174	.293	.184	-----

*Difference is significant at the .05 level

**Difference is significant at the .01 level

Hypothesis 1.2 is rejected for this one topic. It is not rejected for the other 39 topics.

Hypothesis 1.3. The third subhypothesis of H_0 tested was:

$H_{0(c)}$: There is no significant difference among the importance ratings of topics as rated by developer versus maintainer entrepreneurs.

Two topics--Topic 19 ("Unique aspects of family firms") and Topic 28 ("Personal selling techniques")--showed significant differences in mean scores between developer and maintainer entrepreneurs. The matrices of paired comparison probabilities are shown in Tables 15 and 16. For Topic 19, there is a stark contrast between the relatively small differences in mean scores among developer, builder, and initiator entrepreneurs and the great difference between these three types and maintainer entrepreneurs.

TABLE 15
PAIRED COMPARISON PROBABILITIES -- TOPIC 19

	<u>Developers</u>	<u>Builders</u>	<u>Initiators</u>	<u>Maintainers</u>
Developers	-----			
Builders	.993	-----		
Initiators	.987	.940	-----	
Maintainers	.014*	.042*	.003**	-----

*Difference is significant at the .05 level

**Difference is significant at the .01 level

TABLE 16
PAIRED COMPARISON PROBABILITIES -- TOPIC 28

	<u>Developers</u>	<u>Builders</u>	<u>Initiators</u>	<u>Maintainers</u>
Developers	-----			
Builders	.972	-----		
Initiators	.082	.528	-----	
Maintainers	.024*	.334	.953	-----

*Difference is significant at the .05 level

**Difference is significant at the .01 level

Hypothesis 1.3 is rejected for Topics 19 and 28. It is not rejected for other topics.

Hypothesis 1.4. The fourth subhypothesis of H_0 tested was:

$H_0(d)$: There is no significant difference among the importance ratings of topics as rated by builder versus initiator entrepreneurs.

Tukey's HSD revealed that significant differences in mean scores between builder and initiator entrepreneurs exist for two topics. These are Topic 5 ("Developing marketing plans/strategies")

and Topic 10 ("Cash management: cash flow principles; cash budgeting/forecasting"). The paired comparison probabilities matrix for Topic 5 was shown in Table 14. The matrix for Topic 10 is shown in Table 17.

TABLE 17
PAIRED COMPARISON PROBABILITIES -- TOPIC 10

	<u>Developers</u>	<u>Builders</u>	<u>Initiators</u>	<u>Maintainers</u>
Developers	-----			
Builders	.416	-----		
Initiators	.536	.029*	-----	
Maintainers	.891	.099	.819	-----

*Difference is significant at the .05 level

**Difference is significant at the .01 level

Hypothesis 1.4 is rejected for Topics 5 and 10. It is not rejected for the other topics rated by these groups.

Hypothesis 1.5. The fifth subhypothesis of H_0 tested was:

$H_{0(e)}$: There is no significant difference among the importance ratings of topics as rated by builder versus maintainer entrepreneurs.

A significant difference was found to exist in mean scores between builder and maintainer entrepreneurs for Topics 19 ("Unique aspects of family firms") and 38 ("Choosing form of ownership"). The paired comparison probabilities matrix for Topic 38 is shown below in Table 18. The probabilities for Topic 19 were previously shown in Table 15.

Hypothesis 1.5 is rejected for Topics 19 and 38. It is not rejected for other topics.

TABLE 18
 PAIRED COMPARISON PROBABILITIES -- TOPIC 38

	<u>Developers</u>	<u>Builders</u>	<u>Initiators</u>	<u>Maintainers</u>
Developers	-----			
Builders	.400	-----		
Initiators	.979	.169	-----	
Maintainers	.253	.008**	.231	-----

*Difference is significant at the .05 level

**Difference is significant at the .01 level

Hypothesis 1.6. The sixth subhypothesis of H_0 tested was:

H_0 1(f): There is no significant difference among the importance ratings of topics as rated by initiator versus maintainer entrepreneurs.

A significant difference was found to exist in mean scores between initiator and maintainer entrepreneurs for Topic 19 ("Unique aspects of family firms--time demands/relationships/etc."). The paired comparison probabilities matrix for Topic 19 was shown above in Table 15, since a significant difference in mean scores also existed between developer and maintainer entrepreneurs, as well as between builder and maintainer entrepreneurs.

Hypothesis 1.6 is rejected for Topic 19. It is not rejected for other topics.

Hypothesis #2: Starters vs. Acquirers

The second null hypothesis tested in this study was:

H_0 2: There are no significant differences in the ratings given to topics between entrepreneurs who started their own firms (developers and initiators) versus those who acquired their firms (builders and maintainers).

Number of Respondents (N). Starters and acquirers were almost evenly divided. There were 307 entrepreneurs who started their current firm; 304 had acquired their firm through purchase, inheritance, or some other means. As was the case with the first null hypothesis, the number of respondents varies to a minor degree from topic to topic. The smallest N for starters for any topic was 300; at least 294 acquirers rated every topic. The number of responses for each of the 40 topics is shown in Appendix 6.

Topic Ratings. Table 19 shows the mean scores, standard errors, F-scores, and probabilities of F for the 40 topics. Mean scores and standard errors are shown for starters (those who answered "Yes" to Question 15: "I am the original owner/manager of this firm"), and for acquirers (entrepreneurs who purchased, inherited, or otherwise assumed control of the firms they now own and/or manage). A listing of topics in order of importance for both entrepreneurial types, along with means, standard errors, and number of respondents can also be found in Appendix 6.

Eight of the ten topics were the same for the two groups. The top five items were the same--though there were minor differences in their rankings. Topic 12 (Customer service) was the top-rated topic for those who started their own firms, while this item was ranked second for "acquirers." Topic 1 ("Motivating employees") received the highest mean scores among acquirers. It was the number two topic among "starters." Topic 2 ("Recordkeeping requirements") was rated third by both groups. The other two topics in the top five for both groups were Topic 4, ("Social responsibility/business

TABLE 19
MEAN SCORES AND F-RATIOS FOR "STARTER" VS. "ACQUIRER" ENTREPRENEURS

<u>Topic Number</u>	<u>Topic</u>	<u>Starters</u>	<u>Acquirers</u>	<u>F</u>	<u>p</u>
1	Motivating employees	4.454	4.548	1.589	.208
2	Recordkeeping requirements	4.417	4.306	2.830	.093
3	Merchandise layout	3.944	4.059	1.544	.215
4	Social responsibility/ business ethics	4.316	4.220	1.840	.175
5	Developing marketing plans/strategies	4.000	4.089	1.466	.226
6	Basic economic principles	3.783	3.732	.417	.519
7	Evaluation of employees	3.792	3.880	1.102	.294
8	Understanding/interpreting financial statements	3.892	4.007	2.259	.133
9	Problem solving/decision making techniques	4.168	4.135	.223	.637
10	Cash management: cash flow principles; cash budgeting/forecasting	4.207	4.284	1.152	.284

(Table 19, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Starters</u>	<u>Acquirers</u>	<u>F</u>	<u>p</u>
11	Problems/operating strategies for specific business types	3.690	3.597	1.238	.266
12	The customer service function	4.505	4.521	.072	.789
13	Reasons for small business success/failure	4.003	3.870	2.302	.130
14	Self-image building	3.829	3.690	2.280	.132
15	Cash management: working capital requirements	4.118	4.093	.114	.735
16	Public relations	3.881	3.894	.027	.870
17	Coping with change/ uncertainty/ambiguity	3.783	3.736	.362	.548
18	Consumerism--trends/principles	3.451	3.462	.020	.889
19	Unique aspects of family firms	3.542	3.211	11.075	.001
20	Security issues	3.266	3.294	.080	.777
21	Role/importance of small business	3.424	3.294	1.590	.208

(Table 19, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Starters</u>	<u>Acquirers</u>	<u>F</u>	<u>p</u>
22	Basic purchasing principles/ practices	3.498	3.464	.149	.699
23	Goal setting: planning/ forecasting/budgeting	3.987	3.954	.187	.666
24	Personal characteristics of successful entrepreneurs	3.904	3.719	4.357	.037
25	Pricing	3.938	3.901	.202	.653
26	Periodic reviews of the organization	3.480	3.510	.152	.697
27	Advertising campaigns	3.574	3.469	1.611	.205
28	Personal selling techniques	3.794	3.690	1.373	.242
29	Payrolls: Wage and salary administration	3.597	3.678	.914	.339
30	Payrolls: preparation/tax and benefit laws	3.594	3.594	.000	1.000
31	Hiring practices/requirements	3.625	3.689	.530	.467

(Table 19, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Starters</u>	<u>Acquirers</u>	<u>F</u>	<u>p</u>
32	Communications skills	4.033	3.983	.364	.546
33	Designing/maintaining the accounting system	3.853	3.748	1.548	.214
34	Team building skills	3.974	4.007	.156	.693
35	Calculating/understanding financial ratios	3.471	3.508	.165	.685
36	Inventory control principles	3.379	3.538	2.772	.096
37	Determining/planning physical facilities	3.287	3.347	.401	.527
38	Choosing form of ownership	3.408	3.275	1.861	.173
39	Training and development for employees	3.754	3.729	.083	.774
40	Safety standards/practices	3.600	3.758	2.887	.090

ethics"), ranked fourth by starters and fifth by acquirers; and Topic 10 ("Cash management: cash flow principles; cash budgeting/forecasting"), for which the rankings were reversed. Problem solving/decision making, working capital management, and marketing planning were other items ranked in the top ten by both groups.

At the other end of the scale, the bottom 12 topics were the same for both groups. Included in these topics were items pertaining to payroll preparation/tax and benefit laws; advertising; aspects of family firms; purchasing; organizational review; financial ratios; consumerism; the role and importance of small business; selection of ownership form; inventory control; facilities planning; and security.

Significant differences in mean scores were found for two topics. These are Topic 19 ("Unique aspects of family firms"); and Topic 24 ("Personal characteristics of successful entrepreneurs"). Table 19 shows the significance levels for these topics. The difference in mean scores between the two groups for Topic 19 was significant not only at the .05 level, but also at the .001 level. Topic 24 showed significant differences at the .05 level.

This null hypothesis is rejected for these two topics. It is not rejected for the other topics.

Hypothesis #3: Growth-Oriented vs. Non Growth-Oriented

The third null hypothesis tested in this study was:

- H 3: There are no significant differences in the ratings
 - o given to topics between entrepreneurs who are growth-oriented (developers and builders) versus those who are not growth-oriented (initiators and maintainers).

Number of Respondents (N). Between the developer and builder categories, 138 (22.6%) of the respondents were classified as "growth-oriented" entrepreneurs. The remaining 473 owner/managers (77.4%) did not have a growth orientation.

Responses again varied slightly by topic. As was also previously the case, nonresponse to individual topics was minor. No topic was rated by fewer than 135 (97.8%) of the "growth-oriented" group. At least 460 (97.3%) of the entrepreneurs without a growth orientation rated each topic. The number of respondents in each group for the 40 topics can be found in Appendix 6.

Topic Ratings. Means and standard errors are shown in Table 20 by topic for both growth-oriented entrepreneurs and those who are not. F-statistics and probabilities of F are also shown in this table. A listing of topics in order of importance for both growth-oriented and non-growth-oriented entrepreneurs can be found in Appendix 6.

Customer service was the highest-rated topic by growth-oriented entrepreneurs. Employee motivation received the next highest score. For non-growth-oriented entrepreneurs, this order was reversed. Both groups ranked Topic 2 ("Recordkeeping requirements") third.

Other topics in the top ten for both entrepreneur types include communications skills (Topic 32); cash management (Topics 10 and 15); problem solving and decision making (Topic 9); and social responsibility and business ethics (Topic 4).

At the other end of the scale, topics in the bottom five for both groups included the role and importance of small business

TABLE 20
MEAN SCORES AND F-RATIOS FOR "GROWTH" VS. "NON-GROWTH" ENTREPRENEURS

<u>Topic Number</u>	<u>Topic</u>	<u>Growth Entrep.</u>	<u>Non-Growth Entrep.</u>	<u>F</u>	<u>p</u>
1	Motivating employees	4.459	4.512	.349	.555
2	Recordkeeping requirements	4.442	4.338	1.726	.189
3	Merchandise layout	3.964	4.013	.197	.658
4	Social responsibility/ business ethics	4.199	4.288	1.131	.288
5	Developing marketing plans/strategies	4.285	3.974	12.562	.000
6	Basic economic principles	3.826	3.737	.889	.346
7	Evaluation of employees	3.787	3.850	.399	.528
8	Understanding/interpreting financial statements	4.029	3.926	1.285	.257
9	Problem solving/decision making techniques	4.243	4.125	2.033	.154
10	Cash management: cash flow principles; cash budgeting/forecasting	4.394	4.202	5.095	.024

(Table 20, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Growth Entrep.</u>	<u>Non-Growth Entrep.</u>	<u>F</u>	<u>p</u>
11	Problems/operating strategies for specific business types	3.852	3.583	7.297	.007
12	The customer service function	4.522	4.511	.023	.880
13	Reasons for small business success/failure	4.007	3.916	.759	.384
14	Self-image building	3.826	3.740	.613	.434
15	Cash management: working capital requirements	4.263	4.060	5.187	.023
16	Public relations	4.007	3.853	2.620	.106
17	Coping with change/ uncertainty/ambiguity	3.818	3.743	.646	.422
18	Consumerism--trends/principles	3.551	3.429	1.586	.208
19	Unique aspects of family firms	3.599	3.311	5.845	.016
20	Security issues	3.333	3.264	.359	.549
21	Role/importance of small business	3.478	3.324	1.556	.213

(Table 20, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Growth Entrep.</u>	<u>Non-Growth Entrep.</u>	<u>F</u>	<u>p</u>
22	Basic purchasing principles/ practices	3.500	3.476	.052	.819
23	Goal setting: planning/ forecasting/budgeting	4.130	3.923	5.197	.023
24	Personal characteristics of successful entrepreneurs	3.868	3.796	.456	.500
25	Pricing	3.964	3.907	.333	.564
26	Periodic reviews of the organization	3.587	3.468	1.730	.189
27	Advertising campaigns	3.699	3.470	5.303	.022
28	Personal selling techniques	3.993	3.669	9.400	.002
29	Payrolls: Wage and salary administration	3.664	3.629	.119	.730
30	Payrolls: preparation/tax and benefit laws	3.708	3.561	1.772	.184
31	Hiring practices/requirements	3.838	3.604	5.005	.026

(Table 20, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Growth Entrep.</u>	<u>Non-Growth Entrep.</u>	<u>F</u>	<u>p</u>
32	Communications skills	4.043	3.998	.219	.640
33	Designing/maintaining the accounting system	3.906	3.771	1.794	.181
34	Team building skills	4.007	3.985	.049	.824
35	Calculating/understanding financial ratios	3.572	3.465	.944	.332
36	Inventory control principles	3.442	3.463	.033	.855
37	Determining/planning physical facilities	3.319	3.316	.001	.981
38	Choosing form of ownership	3.565	3.277	6.134	.014
39	Training and development for employees	3.912	3.692	4.607	.032
40	Safety standards/practices	3.672	3.681	.007	.934

(Topic 21); physical facilities planning (Topic 37); and security issues (Topic 20).

Using a mean score of 4.00 as signifying "importance" ("4" corresponds to "Important" on the rating scale used by the respondents and is the statistical midpoint of the range for this rating), growth-oriented entrepreneurs rated many more topics as "important" than did those who were not growth-oriented. Fourteen topics received mean scores of 4.00 or higher for those small business owner/managers possessing a growth orientation. Only eight topics received these scores among those who did not. On the other hand, only four topics (21, 36, 20, and 37) showed mean scores of less than 3.5 for growth-oriented entrepreneurs. For those not so oriented, 11 topics scored below this level.

These mean scores suggest that growth-oriented entrepreneurs might generally perceive topics as being more important. The grand topic mean for all topics for this group was 3.881. The overall mean for non-growth-oriented entrepreneurs was only 3.771. An independent t-test determined that this difference between groups was significant at the .05 level. The results of this t-test are shown in Table 21.

TABLE 21
T-TEST FOR DIFFERENCES IN MEAN SCORES
(GROWTH-ORIENTED VERSUS NON-GROWTH-ORIENTED ENTREPRENEURS)

<u>Entrepreneur Type</u>	<u>Mean</u>	<u>SD</u>	<u>t</u>	<u>DF</u>	<u>p</u>
Growth-Oriented	3.881	.618	2.017	609	.044
Non-Growth-Oriented	3.771	.591			

Significant differences were found in the mean scores for 11 topics. These are shown in Table 22.

TABLE 22
TOPICS FOR WHICH SIGNIFICANT DIFFERENCES WERE FOUND
(GROWTH-ORIENTED vs. NON-GROWTH-ORIENTED ENTREPRENEURS)

<u>Topic Number</u>	<u>Topic</u>	<u>F-Ratio</u>
5	Developing marketing plans/strategies	12.562**
10	Cash management: Cash flow principles; cash budgeting/forecasting	5.095*
11	Problems/operating strategies for specific business types	7.297**
15	Cash management: Figuring working capital requirements	5.187*
19	Unique aspects of family firms	5.845*
23	Goal setting: Principles of planning/ budgeting	5.197*
27	Advertising campaigns for small firms	5.303*
28	Personal selling techniques	9.400**
31	Hiring practices/requirements	5.005*
38	Choosing form of ownership	6.134*
39	Training and development for employees	4.607*

*Difference is significant at the .05 level

**Difference is significant at the .01 level

Null hypothesis #3 is rejected for Topics 5, 10, 11, 15, 19, 23, 27, 28, 31, 38, and 39. It is not rejected for other topics.

Hypothesis #4: One Year or Less With Firm vs. More Than One Year

The fourth null hypothesis tested in this study was:

- H 4: There are no significant differences in the ratings
 o given to topics among entrepreneurs with one year or less small business management experience in their current firm versus those entrepreneurs with more than one year of experience.

Number of Respondents (N). Thirty-eight entrepreneurs (6.22%) had owned and/or managed their current firm for one year or less.

All topics except one--Topic 6--were rated by all members of this group. The other 573 respondents (93.78% of the total sample) had been with their firm for more than one year. Again, responses varied slightly by topic. The minimum response to any item was that for Topic 11, which was rated by 557 people (97.2%). Topic nonresponse was determined to be immaterial for this hypothesis.

Topic Ratings. Mean scores, standard errors, and probability levels are shown in Table 23 by topic for both entrepreneurs who have been with their current firm for one year or less, and those who have been there more than one year. F-scores and probabilities of F are also shown in this table. A listing of topics in order of importance for both entrepreneur types can be found in Appendix 6.

Eight of the top ten topics were similar for the two groups. For those in business one year or less, Topic 1 ("Motivating employees") ranked first. This item was second-ranked for those in business more than one year. For this latter group, Topic 12 (Customer service) scored the highest rating. Other topics in the top ten for both groups concerned recordkeeping requirements, cash management, social responsibility and business ethics, marketing planning and strategy formulation, and problem solving/decision making.

Lower-rated topics were also quite similar. Eight topics were on both groups' "bottom ten" list. These topics pertained to consumerism, family firms, security issues, the role and importance of small business, purchasing, inventory control, facilities planning, and choosing the form of business organization.

TABLE 23
MEAN SCORES AND F-RATIOS FOR TOPICS
ENTREPRENEURS IN BUSINESS ONE YEAR OR LESS VERSUS MORE THAN ONE YEAR

<u>Topic Number</u>	<u>Topic</u>	<u>One Year or Less</u>	<u>More Than One Year</u>	<u>F</u>	<u>p</u>
1	Motivating employees	4.500	4.500	.000	1.000
2	Recordkeeping requirements	4.447	4.356	.445	.505
3	Merchandise layout	4.289	3.982	2.577	.109
4	Social responsibility/ business ethics	4.237	4.270	.053	.818
5	Developing marketing plans/strategies	4.263	4.030	2.346	.126
6	Basic economic principles	3.973	3.743	1.935	.165
7	Evaluation of employees	3.711	3.844	.602	.438
8	Understanding/interpreting financial statements	4.053	3.942	.489	.485
9	Problem solving/decision making techniques	4.263	4.144	.704	.402
10	Cash management: cash flow principles; cash budgeting/forecasting	4.421	4.234	1.618	.204

(Table 23, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>One Year or Less</u>	<u>More Than One Year</u>	<u>F</u>	<u>p</u>
11	Problems/operating strategies for specific business types	3.816	3.632	1.147	.285
12	The customer service function	4.421	4.519	.593	.442
13	Reasons for small business success/failure	3.816	3.945	.510	.475
14	Self-image building	3.632	3.768	.513	.474
15	Cash management: working capital requirements	4.079	4.107	.033	.855
16	Public relations	4.000	3.880	.523	.470
17	Coping with change/ uncertainty/ambiguity	3.684	3.764	.249	.618
18	Consumerism--trends/principles	3.316	3.466	.797	.372
19	Unique aspects of family firms	3.211	3.388	.743	.389
20	Security issues	3.053	3.295	1.488	.223
21	Role/importance of small business	3.105	3.376	1.605	.206

(Table 23, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>One Year or Less</u>	<u>More Than One Year</u>	<u>F</u>	<u>p</u>
22	Basic purchasing principles/ practices	3.237	3.497	1.996	.158
23	Goal setting: planning/ forecasting/budgeting	3.895	3.975	.261	.610
24	Personal characteristics of successful entrepreneurs	3.658	3.822	.805	.370
25	Pricing	3.921	3.920	.000	.993
26	Periodic reviews of the organization	3.579	3.490	.327	.568
27	Advertising campaigns	3.553	3.519	.038	.846
28	Personal selling techniques	3.868	3.734	.534	.465
29	Payrolls: Wage and salary administration	3.658	3.636	.016	.899
30	Payrolls: preparation/tax and benefit laws	3.684	3.588	.253	.615
31	Hiring practices/requirements	3.763	3.650	.395	.530
32	Communications skills	3.921	4.014	.304	.582

(Table 23, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>One Year or Less</u>	<u>More Than One Year</u>	<u>F</u>	<u>p</u>
33	Designing/maintaining the accounting system	3.868	3.797	.168	.682
34	Team building skills	3.789	4.004	1.549	.214
35	Calculating/understanding financial ratios	3.605	3.482	.417	.519
36	Inventory control principles	3.053	3.485	4.824	.028
37	Determining/planning physical facilities	3.026	3.336	2.578	.109
38	Choosing form of ownership	3.158	3.354	.941	.332
39	Training and development for employees	3.553	3.754	1.290	.256
40	Safety standards/practices	2.526	3.689	.713	.399

Differences in topic means were significant at the .05 level for only one topic: Topic 36 ("Inventory control principles").

The null hypothesis is rejected for Topic 36. It is not rejected for other topics.

Hypothesis #5: Previous Small Business Management Experience Levels

The fifth null hypothesis tested in this study was:

- H₅: There are no significant differences in the ratings given to topics among developer, builder, initiator, and maintainer entrepreneurs who have previously owned a firm versus those who are managing their first small business.

Number of Respondents (N). Of 611 survey respondents, 610 indicated the presence or absence of previous experience owning and/or managing a small business. The number of respondents in each cell (entrepreneurial category--both with and without previous experience) is shown in Figure 4 below.

FIGURE 4:

EXPANDED ENTREPRENEURIAL TYPOLOGY MATRIX: NUMBER OF RESPONDENTS WITH AND WITHOUT PREVIOUS EXPERIENCE (BY ENTREPRENEUR TYPE)

(Total N = 610)

		Growth/Innovation			
		Yes		No	
Organization Creation	Yes	Developer		Initiator	
		With	N = 40	With	N = 67
	No	Without	N = 51	Without	N = 149
		Builder		Maintainer	
	No	With	N = 19	With	N = 76
		Without	N = 28	Without	N = 180

Individual nonresponse to topics was minimal. Table 24 shows means, standard errors, number of respondents in each cell by topic, and topic rankings by cell. Several means were identical. In determining cell rankings, to break "ties" among means, the higher ranking was accorded that topic with the lower standard error. Every question was answered by at least 89.5% of the cell members.

A Chi-square value of 310.81 with seven degrees of freedom indicates significant differences beyond the .001 level within the eight cell populations. This clarifies the results of previous Chi-square tests of cell counts among the entrepreneurial types. It is the non-growth-oriented entrepreneurs without previous experience who seem to predominate in Oregon.

Topic Ratings. Topic 12 ("Customer service") received the highest mean score for four of the eight groups; it ranked no lower than second for any group. Three other topics were highest-ranked by at least one group. These were: Topic 1 ("Motivating employees"), two groups; Topic 10 ("Cash management: cash flow principles, cash budgeting/forecasting"), one group; and Topic 2 ("Recordkeeping requirements"), one group.

Two other topics placed among the top ten topics for all eight groups. These were Topic 9 ("Problem solving/decision making techniques") and Topic 15 ("Cash management: figuring working capital requirements").

At the other end of the ratings, only three topics placed among in the bottom ten for all eight groups. These were Topics 20 ("Security issues: employee theft/embezzlement/shoplifting/

TABLE 24
NUMBER OF RESPONDENTS, MEAN SCORES, STANDARD ERRORS, AND RANKINGS FOR TOPICS
ENTREPRENEURS WITH VERSUS WITHOUT PREVIOUS EXPERIENCE
(BY ENTREPRENEUR TYPE)

Topic Number	Topic	Developer Entrepreneurs							
		<u>With Experience</u>				<u>Without Experience</u>			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
1	Motivating employees	39	4.538	.146	2	51	4.471	.128	2
2	Recordkeeping requirements	40	4.500	.129	3	51	4.451	.114	3
3	Merchandise layout	40	4.000	.181	19	50	3.820	.162	23
4	Social responsibility/ business ethics	40	4.050	.137	14	51	4.333	.121	5
5	Developing marketing plans/strategies	40	4.500	.141	4	51	4.098	.125	8
6	Basic economic principles	40	3.750	.154	28	51	3.824	.136	20
7	Evaluation of employees	38	3.868	.167	22	51	3.647	.144	27
8	Understanding/interpreting financial statements	40	4.050	.149	15	51	3.922	.132	14
9	Problem solving/decision making techniques	39	4.205	.136	8	51	4.333	.119	4

(Table 24, continued)

		<u>Builder Entrepreneurs</u>							
<u>Topic Number</u>	<u>Topic</u>	<u>With Experience</u>				<u>Without Experience</u>			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
1	Motivating employees	18	4.333	.215	5	27	4.407	.175	3
2	Recordkeeping requirements	19	4.368	.187	4	28	4.393	.154	4
3	Merchandise layout	19	4.053	.263	17	28	4.107	.217	9
4	Social responsibility/ business ethics	17	4.294	.210	8	28	4.107	.164	8
5	Developing marketing plans/strategies	19	4.211	.205	9	27	4.370	.172	5
6	Basic economic principles	19	4.053	.224	14	28	3.786	.184	22
7	Evaluation of employees	19	4.000	.236	19	28	3.786	.195	23
8	Understanding/interpreting financial statements	19	4.105	.217	13	28	4.143	.178	7
9	Problem solving/decision making techniques	19	4.316	.194	6	27	4.074	.163	10

(Table 24, continued)

Topic Number	Topic	Initiator Entrepreneurs							
		With Experience				Without Experience			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
1	Motivating employees	66	4.379	.112	4	146	4.459	.075	2
2	Recordkeeping requirements	67	4.552	.100	1	149	4.322	.067	4
3	Merchandise layout	67	4.015	.140	12	148	3.939	.094	11
4	Social responsibility/ business ethics	65	4.446	.108	3	148	4.324	.071	3
5	Developing marketing plans/strategies	66	4.136	.110	7	148	3.770	.073	22
6	Basic economic principles	65	3.723	.121	23	148	3.804	.080	18
7	Evaluation of employees	66	3.894	.127	18	148	3.777	.085	20
8	Understanding/interpreting financial statements	66	3.833	.116	20	148	3.865	.078	15
9	Problem solving/decision making techniques	66	4.136	.104	6	148	4.115	.070	6

(Table 24, continued)

Topic Number	Topic	Maintainer Entrepreneurs							
		With Experience				Without Experience			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
1	Motivating employees	74	4.689	.106	1	174	4.529	.069	1
2	Recordkeeping requirements	76	4.355	.094	3	180	4.261	.061	3
3	Merchandise layout	76	4.132	.132	7	179	4.017	.086	10
4	Social responsibility/ business ethics	75	4.320	.100	4	179	4.184	.065	5
5	Developing marketing plans/strategies	76	4.105	.102	8	179	4.022	.067	8
6	Basic economic principles	74	3.811	.113	19	180	3.811	.073	22
7	Evaluation of employees	75	3.987	.119	12	177	3.831	.077	15
8	Understanding/interpreting financial statements	76	4.013	.108	11	179	3.966	.071	12
9	Problem solving/decision making techniques	76	4.250	.097	6	180	4.072	.063	6

(Table 24, continued)

Topic Number	Topic	Developer Entrepreneurs							
		<u>With Experience</u>				<u>Without Experience</u>			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
10	Cash management: cash flow principles; cash budgeting/forecasting	39	4.282	.141	6	51	4.333	.123	6
11	Problems/operating strategies for specific business types	39	3.821	.163	25	49	3.878	.146	16
12	The customer service function	40	4.575	.121	1	51	4.510	.107	1
13	Reasons for small business success/failure	39	4.179	.172	10	51	3.824	.151	22
14	Self-image building	40	3.800	.180	26	51	3.863	.159	17
15	Cash management: working capital requirements	40	4.200	.146	9	51	4.216	.129	7
16	Public relations	40	4.125	.156	11	51	3.824	.138	21
17	Coping with change/uncertainty/ambiguity	39	3.821	.154	24	51	3.843	.135	18
18	Consumerism--trends/principles	40	3.700	.158	29	51	3.333	.140	37
19	Unique aspects of family firms	39	3.795	.193	27	51	3.412	.169	36
20	Security issues	40	3.350	.188	37	51	3.176	.167	40

(Table 24, continued)

Topic Number	Topic	Builder Entrepreneurs							
		<u>With Experience</u>				<u>Without Experience</u>			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
10	Cash management: cash flow principles; cash budgeting/forecasting	19	4.526	.201	2	28	4.571	.166	1
11	Problems/operating strategies for specific business types	19	3.895	.234	24	28	3.821	.193	18
12	The customer service function	19	4.526	.176	1	28	4.464	.145	2
13	Reasons for small business success/failure	19	4.053	.247	16	28	4.071	.204	12
14	Self-image building	19	3.947	.261	22	28	3.714	.215	28
15	Cash management: working capital requirements	18	4.444	.217	3	28	4.321	.174	6
16	Public relations	19	4.316	.226	7	28	3.964	.186	15
17	Coping with change/uncertainty/ambiguity	19	4.158	.221	12	28	3.536	.182	38
18	Consumerism--trends/principles	19	3.842	.229	26	28	3.536	.189	39
19	Unique aspects of family firms	19	3.737	.277	32	28	3.571	.228	37
20	Security issues	19	3.421	.273	38	28	3.536	.225	40

(Table 24, continued)

Topic Number	Topic	Initiator Entrepreneurs							
		<u>With Experience</u>				<u>Without Experience</u>			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
10	Cash management: cash flow principles; cash budgeting/forecasting	66	4.212	.108	5	148	4.142	.072	5
11	Problems/operating strategies for specific business types	66	3.621	.126	27	146	3.623	.084	25
12	The customer service function	66	4.485	.094	2	148	4.493	.063	1
13	Reasons for small business success/failure	64	4.125	.135	8	147	3.966	.089	9
14	Self-image building	66	3.939	.140	17	147	3.776	.094	21
15	Cash management: working capital requirements	66	4.106	.114	9	148	4.068	.076	7
16	Public relations	66	3.939	.121	15	146	3.808	.082	17
17	Coping with change/uncertainty/ambiguity	66	3.727	.118	22	148	3.777	.079	19
18	Consumerism--trends/principles	66	3.561	.123	29	147	3.374	.082	36
19	Unique aspects of family firms	64	3.563	.151	28	147	3.510	.100	31
20	Security issues	66	3.318	.147	40	147	3.252	.098	40

(Table 24, continued)

Topic Number	Topic	Maintainer Entrepreneurs							
		With Experience				Without Experience			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
10	Cash management: cash flow principles; cash budgeting/forecasting	76	4.263	.101	5	179	4.218	.066	4
11	Problems/operating strategies for specific business types	74	3.649	.119	27	173	3.497	.078	29
12	The customer service function	76	4.566	.088	2	179	4.508	.057	2
13	Reasons for small business success/failure	76	3.908	.124	15	176	3.795	.081	17
14	Self-image building	76	3.697	.131	25	179	3.648	.085	24
15	Cash management: working capital requirements	76	4.066	.106	9	179	4.028	.069	7
16	Public relations	75	3.907	.114	16	180	3.828	.074	16
17	Coping with change/uncertainty/ambiguity	76	3.724	.110	22	179	3.726	.072	20
18	Consumerism--trends/principles	76	3.395	.115	36	179	3.430	.075	34
19	Unique aspects of family firms	75	2.813	.139	40	176	3.267	.091	37
20	Security issues	75	3.120	.138	38	180	3.317	.089	36

(Table 24, continued)

Topic Number	Topic	Developer Entrepreneurs							
		With Experience				Without Experience			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
21	Role/importance of small business	40	3.300	.202	39	51	3.490	.179	34
22	Basic purchasing principles/ practices	40	3.400	.175	36	51	3.569	.155	30
23	Goal setting: planning/ forecasting/budgeting	40	4.325	.148	5	51	4.000	.131	10
24	Personal characteristics of successful entrepreneurs	38	4.000	.177	18	51	3.765	.153	25
25	Pricing	40	4.100	.162	12	51	3.941	.143	13
26	Periodic reviews of the organization	40	3.600	.148	32	51	3.412	.131	35
27	Advertising campaigns	38	4.026	.165	16	51	3.549	.142	31
28	Personal selling techniques	40	3.925	.173	21	51	4.098	.153	9
29	Payrolls: Wage and salary administration	39	3.641	.168	31	51	3.627	.147	28
30	Payrolls: preparation/tax and benefit laws	39	3.590	.183	33	51	3.784	.160	24

(Table 24, continued)

Topic Number	Topic	Builder Entrepreneurs							
		<u>With Experience</u>				<u>Without Experience</u>			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
21	Role/importance of small business	19	3.632	.293	35	28	3.607	.242	34
22	Basic purchasing principles/ practices	19	3.368	.254	39	28	3.607	.209	33
23	Goal setting: planning/ forecasting/budgeting	19	4.158	.215	11	28	4.071	.177	11
24	Personal characteristics of successful entrepreneurs	19	4.211	.250	10	28	3.643	.206	31
25	Pricing	19	3.947	.235	21	28	3.821	.194	19
26	Periodic reviews of the organization	19	3.737	.214	30	28	3.786	.177	21
27	Advertising campaigns	19	3.526	.233	36	28	3.643	.192	30
28	Personal selling techniques	19	3.789	.251	29	28	4.036	.207	14
29	Payrolls: Wage and salary administration	19	3.684	.240	33	28	3.750	.198	26
30	Payrolls: preparation/tax and benefit laws	19	3.947	.262	23	28	3.571	.216	35T

(Table 24, continued)

Topic Number	Topic	Initiator Entrepreneurs							
		<u>With Experience</u>				<u>Without Experience</u>			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
21	Role/importance of small business	66	3.439	.157	37	147	3.429	.105	34
22	Basic purchasing principles/practices	66	3.470	.136	35	148	3.514	.091	30
23	Goal setting: planning/forecasting/budgeting	66	4.061	.116	10	147	3.857	.077	16
24	Personal characteristics of successful entrepreneurs	66	3.939	.134	16	148	3.912	.090	12
25	Pricing	67	3.970	.125	13	149	3.879	.084	13
26	Periodic reviews of the organization	67	3.478	.114	34	148	3.473	.077	32
27	Advertising campaigns	67	3.642	.124	25	149	3.436	.083	33
28	Personal selling techniques	67	3.821	.134	21	148	3.642	.090	24
29	Payrolls: Wage and salary administration	67	3.552	.128	30	148	3.595	.086	27
30	Payrolls: preparation/tax and benefit laws	67	3.463	.139	36	146	3.589	.094	28

(Table 24, continued)

Topic Number	Topic	<u>Maintainer Entrepreneurs</u>							
		<u>With Experience</u>				<u>Without Experience</u>			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
21	Role/importance of small business	76	3.197	.147	37	179	3.246	.096	39
22	Basic purchasing principles/practices	76	3.421	.127	35	180	3.461	.082	32
23	Goal setting: planning/forecasting/budgeting	76	3.855	.108	17	179	3.950	.070	13
24	Personal characteristics of successful entrepreneurs	76	3.566	.125	30	179	3.749	.081	18
25	Pricing	75	3.933	.118	14	180	3.894	.076	14
26	Periodic reviews of the organization	76	3.526	.107	32	180	3.433	.070	33
27	Advertising campaigns	76	3.539	.117	31	179	3.408	.076	35
28	Personal selling techniques	76	3.632	.126	28	179	3.648	.082	23
29	Payrolls: Wage and salary administration	76	3.737	.120	21	180	3.633	.078	26
30	Payrolls: preparation/tax and benefit laws	76	3.658	.131	26	179	3.525	.085	28

(Table 24, continued)

Topic Number	Topic	Developer Entrepreneurs							
		<u>With Experience</u>				<u>Without Experience</u>			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
31	Hiring practices/requirements	39	3.949	.172	20	50	3.760	.152	26
32	Communications skills	40	4.275	.160	7	51	3.980	.141	12
33	Designing/maintaining the accounting system	40	3.850	.165	23	51	3.843	.146	19
34	Team building skills	38	4.026	.167	17	51	4.000	.145	11
35	Calculating/understanding financial ratios	40	3.525	.181	35	51	3.588	.160	29
36	Inventory control principles	40	3.575	.186	34	51	3.176	.165	39
37	Determining/planning physical facilities	40	3.250	.183	40	51	3.216	.162	38
38	Choosing form of ownership	40	3.350	.190	38	51	3.529	.169	33
39	Training and development for employees	39	4.077	.170	13	51	3.922	.148	15
40	Safety standards/practices	39	3.692	.184	30	51	3.529	.161	32

(Table 24, continued)

Topic Number	Topic	Builder Entrepreneurs							
		With Experience				Without Experience			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
31	Hiring practices/requirements	19	3.895	.247	25	28	3.786	.203	24
32	Communications skills	19	4.000	.231	18	28	3.857	.191	17
33	Designing/maintaining the accounting system	19	4.000	.239	20	28	4.036	.197	13
34	Team building skills	19	4.053	.237	15	28	3.964	.195	16
35	Calculating/understanding financial ratios	19	3.632	.263	34	28	3.571	.216	35T
36	Inventory control principles	19	3.474	.270	37	28	3.714	.222	29
37	Determining/planning physical facilities	19	3.263	.265	40	28	3.643	.218	32
38	Choosing form of ownership	19	3.737	.276	31	28	3.821	.227	20
39	Training and development for employees	19	3.789	.243	28	28	3.750	.200	27
40	Safety standards/practices	19	3.842	.264	27	28	3.786	.218	25

(Table 24, continued)

Topic Number	Topic	Initiator Entrepreneurs							
		<u>With Experience</u>				<u>Without Experience</u>			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
31	Hiring practices/requirements	67	3.537	.132	33	148	3.534	.088	29
32	Communications skills	67	4.060	.123	11	147	3.973	.083	8
33	Designing/maintaining the accounting system	67	3.836	.127	19	149	3.866	.085	14
34	Team building skills	67	3.970	.126	14	148	3.953	.085	10
35	Calculating/understanding financial ratios	67	3.627	.140	26	148	3.345	.094	37
36	Inventory control principles	67	3.552	.144	32	148	3.318	.097	38
37	Determining/planning physical facilities	67	3.388	.141	38	145	3.276	.096	39
38	Choosing form of ownership	67	3.373	.147	39	148	3.399	.099	35
39	Training and development for employees	67	3.672	.129	24	148	3.649	.087	23
40	Safety standards/practices	67	3.552	.141	31	148	3.622	.095	26

(Table 24, continued)

Topic Number	Topic	Maintainer Entrepreneurs							
		With Experience				Without Experience			
		<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>Rank</u>
31	Hiring practices/requirements	76	3.724	.123	24	178	3.629	.081	27
32	Communications skills	75	3.933	.116	13	178	4.017	.076	9
33	Designing/maintaining the accounting system	76	3.816	.120	18	178	3.640	.078	25
34	Team building skills	76	4.039	.118	10	178	3.989	.077	11
35	Calculating/understanding financial ratios	76	3.487	.131	33	179	3.486	.086	30
36	Inventory control principles	76	3.618	.135	29	179	3.475	.088	31
37	Determining/planning physical facilities	76	3.447	.132	34	179	3.257	.086	38
38	Choosing form of ownership	76	3.118	.138	39	178	3.202	.090	40
39	Training and development for employees	76	3.724	.122	23	179	3.715	.079	21
40	Safety standards/practices	76	3.776	.132	20	178	3.730	.086	19

robbery"); 21 ("The role and importance of small business in the American economy"); and 37 ("Determining and planning physical facilities").

F-ratios were calculated for each categorical variable and for the interaction between variables. These F-ratios are shown in Table 25.

Based on the data in Table 25, significance was suggested within seven topics:

- Topic 5--Developing marketing plans/strategies
- Topic 16--Public relations
- Topic 18--Consumerism--trends/principles
- Topic 19--Unique aspects of family firms
- Topic 27--Advertising campaigns for the small firm
- Topic 28--Personal selling techniques
- Topic 38--Choosing form of ownership

Tables 26-32 show the paired comparison probabilities for the above topics. Significant differences were actually found to exist within only three topics: 5, 19, and 27.

For Topic 5, significant differences were found between developer entrepreneurs with previous experience and non-growth-oriented entrepreneurs (initiators and maintainers) without it. The difference between developers with experience and initiators without such as significant at the .001 level.

Topic 19 comparisons revealed three significant differences. These reflect differences between developers, builders, and initiators on the one hand and maintainers on the other. The contrasts in mean scores between developers with experience, initiators with experience and initiators without experience versus maintainers with experience are all significant at the .01 level.

TABLE 25
F-RATIOS FOR ALL TOPICS
ENTREPRENEURS WITH VERSUS WITHOUT PREVIOUS EXPERIENCE

(Includes Interaction Between Variables)

<u>Topic Number</u>	<u>Topic</u>	<u>Entrep. Type</u>	<u>Prev. Exp.</u>	<u>Inter- action</u>
1	Motivating employees	1.755	.037	.628
2	Recordkeeping requirements	1.250	1.054	.472
3	Merchandise layout	.553	.437	.114
4	Social responsibility/ethics	1.386	.192	1.458
5	Devel. mktg plans/strategies	3.866**	3.423	1.807
6	Basic economic principles	.479	.451	.804
7	Evaluation of employees	.490	2.702	.063
8	Understanding/interpreting financial statements	1.376	.073	.170
9	Problem solv./decision making	.593	.777	.891
10	Cash management: cash flow; budgeting/forecasting	2.296	.003	.128
11	Problems/operating strategies for specific business types	2.147	.150	.290
12	The customer service function	.175	.305	.080
13	Reasons for small business success/failure	1.269	1.826	.382
14	Self-image building	1.002	.653	.280
15	Cash management: working capital requirements	1.981	.225	.056
16	Public relations	1.161	4.401*	.428
17	Coping with change/uncert.	.384	1.857	1.576
18	Consumerism--trends/principles	1.023	3.911*	1.068

*Difference is significant at the .05 level

**Difference is significant at the .01 level

(Table 25, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>Entrep. Type</u>	<u>Prev. Exp.</u>	<u>Inter- action</u>
19	Unique aspects of family firms	8.280**	.085	3.096*
20	Security issues	.605	.021	.681
21	Role/importance of small bus.	1.680	.146	.137
22	Basic purch. principles/prac.	.081	1.137	.165
23	Goal setting	1.953	1.771	1.376
24	Personal characteristics of successful entrepreneurs	2.387	2.018	1.853
25	Pricing	.281	.944	.081
26	Periodic reviews of the org.	1.248	.371	.266
27	Advertising campaigns	2.004	3.699*	.985
28	Personal selling techniques	2.767*	.317	.791
29	Payrolls: Wage/salary admin.	.463	.000	.193
30	Payrolls: preparation/tax and benefit laws	.728	.155	1.049
31	Hiring practices/requirements	2.196	.755	.158
32	Communications skills	.591	1.100	.796
33	Design/maint. acctg. syst.	1.165	.072	.383
34	Team building skills	.101	.179	.019
35	Calculating/understanding financial ratios	.203	.345	.678
36	Inventory control principles	.693	1.197	.789
37	Determ./planning phys. facil.	.407	.008	.782
38	Choosing form of ownership	3.887**	.555	.083
39	Employee training/development	2.136	.262	.107
40	Safety standards/practices	.998	.166	.217

TABLE 26
 PAIRED COMPARISON PROBABILITIES -- TOPIC 5

	<u>D-E</u>	<u>D-NE</u>	<u>B-E</u>	<u>B-NE</u>	<u>I-E</u>	<u>I-NE</u>	<u>M-E</u>	<u>M-NE</u>
D-E	----							
D-NE	.395	----						
B-E	.942	1.000	----					
B-NE	.999	.906	.999	----				
I-E	.460	1.000	1.000	.946	----			
I-NE	.000	.316	.466	.029	.103	----		
M-E	.315	1.000	1.000	.890	1.000	.136	----	
M-NE	.046	.999	.988	.560	.987	.178	.998	----

TABLE 27
 PAIRED COMPARISON PROBABILITIES -- TOPIC 16

	<u>D-E</u>	<u>D-NE</u>	<u>B-E</u>	<u>B-NE</u>	<u>I-E</u>	<u>I-NE</u>	<u>M-E</u>	<u>M-NE</u>
D-E	----							
D-NE	.835	----						
B-E	.997	.581	----					
B-NE	.998	.999	.933	----				
I-E	.982	.998	.826	1.000	----			
I-NE	.621	1.000	.409	.995	.986	----		
M-E	.950	1.000	.742	1.000	1.000	.997	----	
M-NE	.672	1.000	.448	.997	.994	1.000	.999	----

KEY: D-E -- Developer Entrepreneurs with Previous Experience
 D-NE -- Developer Entrepreneurs, No Previous Experience
 B-E -- Builder Entrepreneurs with Previous Experience
 B-NE -- Builder Entrepreneurs, No Previous Experience
 I-E -- Initiator Entrepreneurs with Previous Experience
 I-NE -- Initiator Entrepreneurs, No Previous Experience
 M-E -- Maintainer Entrepreneurs with Previous Experience
 M-NE -- Maintainer Entrepreneurs, No Previous Experience

TABLE 28
 PAIRED COMPARISON PROBABILITIES -- TOPIC 18

	<u>D-E</u>	<u>D-NE</u>	<u>B-E</u>	<u>B-NE</u>	<u>I-E</u>	<u>I-NE</u>	<u>M-E</u>	<u>M-NE</u>
D-E	-----							
D-NE	.663	-----						
B-E	1.000	.556	-----					
B-NE	.998	.989	.970	-----				
I-E	.997	.927	.961	1.000	-----			
I-NE	.601	1.000	.537	.994	.914	-----		
M-E	.773	1.000	.658	.998	.977	1.000	-----	
M-NE	.784	.999	.683	1.000	.986	1.000	1.000	-----

TABLE 29
 PAIRED COMPARISON PROBABILITIES -- TOPIC 19

	<u>D-E</u>	<u>D-NE</u>	<u>B-E</u>	<u>B-NE</u>	<u>I-E</u>	<u>I-NE</u>	<u>M-E</u>	<u>M-NE</u>
D-E	-----							
D-NE	.812	-----						
B-E	1.000	.974	-----					
B-NE	.996	.999	1.000	-----				
I-E	.981	.998	.999	1.000	-----			
I-NE	.896	1.000	.995	1.000	1.000	-----		
M-E	.001	.113	.058	.087	.006	.001	-----	
M-NE	.208	.995	.744	.920	.703	.618	.115	-----

TABLE 30
 PAIRED COMPARISON PROBABILITIES -- TOPIC 27

	<u>D-E</u>	<u>D-NE</u>	<u>B-E</u>	<u>B-NE</u>	<u>I-E</u>	<u>I-NE</u>	<u>M-E</u>	<u>M-NE</u>
D-E	-----							
D-NE	.357	-----						
B-E	.654	1.000	-----					
B-NE	.800	1.000	1.000	-----				
I-E	.577	1.000	1.000	1.000	-----			
I-NE	.030	.997	1.000	.976	.869	-----		
M-E	.236	1.000	1.000	1.000	.999	.996	-----	
M-NE	.015	.998	1.000	.949	.746	1.000	.981	-----

TABLE 31
 PAIRED COMPARISON PROBABILITIES -- TOPIC 28

	<u>D-E</u>	<u>D-NE</u>	<u>B-E</u>	<u>B-NE</u>	<u>I-E</u>	<u>I-NE</u>	<u>M-E</u>	<u>M-NE</u>
D-E	-----							
D-NE	.995	-----						
B-E	1.000	.967	-----					
B-NE	1.000	1.000	.995	-----				
I-E	1.000	.875	1.000	.989	-----			
I-NE	.833	.169	.999	.658	.955	-----		
M-E	.870	.265	.999	.707	.970	1.000	-----	
M-NE	.836	.160	.999	.660	.957	1.000	1.000	-----

TABLE 32
 PAIRED COMPARISON PROBABILITIES -- TOPIC 38

	<u>D-E</u>	<u>D-NE</u>	<u>B-E</u>	<u>B-NE</u>	<u>I-E</u>	<u>I-NE</u>	<u>M-E</u>	<u>M-NE</u>
D-E	-----							
D-NE	.997	-----						
B-E	.945	.998	-----					
B-NE	.757	.970	1.000	-----				
I-E	1.000	.997	.942	.716	-----			
I-NE	1.000	.998	.945	.684	1.000	-----		
M-E	.977	.560	.479	.141	.912	.719	-----	
M-NE	.997	.680	.592	.182	.976	.825	1.000	-----

The interaction present between variables for Topic 19 is shown graphically in Figure 5.

Paired comparison tests for Topic 27 reveal two instances of significant differences between cell means. Developers with experience viewed this topic differently than did 1) initiators without experience and 2) maintainers without experience.

When previous experience was examined as a singular independent variable, F-ratios for three topics proved significant at the .05 level: Topics 5, 16 and 27. Number of respondents for each type, means, and standard errors are shown in Table 33. Analysis of variance tables for these three topics are shown in Tables 34-36.

Null hypothesis 5 is rejected for comparisons between developer entrepreneurs with previous small business management experience and initiators and maintainers without such experience for Topic 5; for these same two comparisons for Topic 27; and for comparisons between

FIGURE 5
INTERACTION BETWEEN VARIABLES
(TOPIC 19 -- UNIQUE ASPECTS OF FAMILY FIRMS)

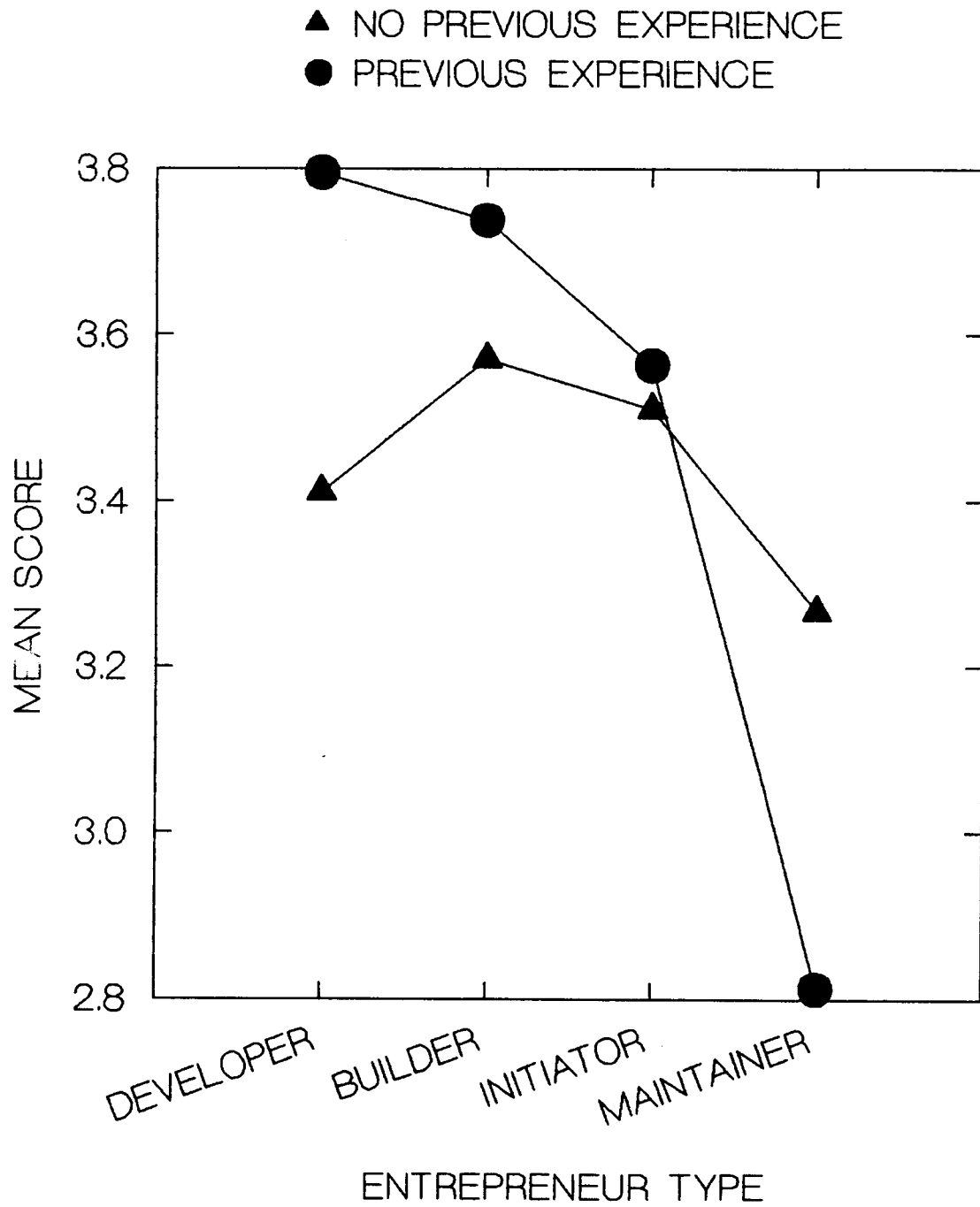


TABLE 33
NUMBER OF RESPONDENTS, MEANS, AND STANDARD ERRORS
FOR TOPICS SHOWING SIGNIFICANT DIFFERENCES
(ENTREPRENEURS WITH VERSUS WITHOUT PREVIOUS EXPERIENCE)

<u>Topic</u>	<u>With Experience</u>			<u>Without Experience</u>		
	<u>N</u>	<u>Mean</u>	<u>SE</u>	<u>N</u>	<u>Mean</u>	<u>SE</u>
5	201	4.204	.064	405	3.963	.045
16	200	4.000	.070	405	3.830	.049
27	200	3.665	.072	407	3.452	.050

TABLE 34
ANALYSIS OF VARIANCE -- TOPIC 5
(ENTREPRENEURS WITH VERSUS WITHOUT PREVIOUS EXPERIENCE)

<u>Source</u>	<u>Sum-of-Squares</u>	<u>DF</u>	<u>Mean-Square</u>	<u>F-Ratio</u>	<u>P</u>
PREV. EXP.	7.803	1	7.803	9.559	0.002
ERROR	493.081	604	0.816		

TABLE 35
ANALYSIS OF VARIANCE -- TOPIC 16
(ENTREPRENEURS WITH VERSUS WITHOUT PREVIOUS EXPERIENCE)

<u>Source</u>	<u>Sum-of-Squares</u>	<u>DF</u>	<u>Mean-Square</u>	<u>F-Ratio</u>	<u>P</u>
PREV. EXP.	3.886	1	3.886	4.004	0.046
ERROR	585.244	603	0.971		

TABLE 36
ANALYSIS OF VARIANCE -- TOPIC 27
(ENTREPRENEURS WITH VERSUS WITHOUT PREVIOUS EXPERIENCE)

<u>Source</u>	<u>Sum-of-Squares</u>	<u>DF</u>	<u>Mean-Square</u>	<u>F-Ratio</u>	<u>P</u>
PREV. EXP.	6.079	1	6.079	5.862	0.016
ERROR	627.371	605	1.037		

developer entrepreneurs with experience, initiator entrepreneurs with experience, and initiator entrepreneurs without experience versus maintainer entrepreneurs with experience for Topic 19. The null hypothesis is not rejected for other topics and other comparisons within the three topics noted above.

Summary

Chapter 5 began with a review of the major hypotheses tested. Research methods were reviewed. SYSTAT software for the personal computer was used to perform t-tests and one- and two-way analyses of variance to determine significance. Dependent variables were the 40 topics rated by more than 600 Oregon entrepreneurs.

As a group, the entrepreneurs in the sample gave significantly higher ratings to five topics. A dependent t-test provided evidence that mean scores for Topic 12 ("The customer service function") and Topic 1 ("Motivating employees") were significantly higher than those of other topics.

Five hypotheses were tested in this study. Data were analyzed by entrepreneurial type, and, in one case, by subtypes; they are shown herein. Table 37 provides a summary of overall mean scores for all topics, emphasizing statistically significant findings for Hypotheses 1-4. Significant findings for Hypothesis 5 are shown in matrix format in Table 38, owing to the large number of comparisons.

Hypothesis 1 concerned differences in the way the four entrepreneurial types view the importance of the 40 topics. One or more significant differences were found among types for Topics 5, 10, 19, 28, and 38.

TABLE 37
SUMMARY OF OVERALL MEANS AND STATISTICALLY SIGNIFICANT FINDINGS
(NULL HYPOTHESES 1-4)

Topic Number	Topic	Overall Mean			HYPOTHESIS 1 (Entrepreneurial Types)					
		4.00+	3.50- 3.999	3.49-	D/B	D/I	D/M	B/I	B/M	I/M
1	Motivating employees	*								
2	Recordkeeping requirements	*								
3	Merchandise layout	*								
4	Social responsibility/ business ethics	*								
5	Developing marketing plans/strategies	*				**		*		
6	Basic economic principles		*							
7	Evaluation of employees		*							
8	Understanding/interpreting financial statements		*							
9	Problem solving/decision making techniques	*								

KEY FOR HYPOTHESIS SYMBOLS:

*Difference is significant at the .05 level

**Difference is significant at the .01 level

(Table 37, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>HYPOTHESIS 2</u>	<u>HYPOTHESIS 3</u>	<u>HYPOTHESIS 4</u>
		<u>(Starters vs. Acquirers)</u>	<u>(Growth vs. Non-Growth)</u>	<u>Years w/Firm 1 Yr. or < vs. More Than 1</u>
1	Motivating employees			
2	Recordkeeping requirements			
3	Merchandise layout			
4	Social responsibility/ business ethics			
5	Developing marketing plans/strategies		**	
6	Basic economic principles			
7	Evaluation of employees			
8	Understanding/interpreting financial statements			
9	Problem solving/decision making techniques			

(Table 37, continued)

Topic Number	Topic	Overall Mean			HYPOTHESIS 1 (Entrepreneurial Types)					
		4.00+	3.50- 3.999	3.49-	D/B	D/I	D/M	B/I	B/M	I/M
10	Cash management: cash flow principles; cash budgeting/forecasting	*						*		
11	Problems/operating strategies for specific business types		*							
12	The customer service function	*								
13	Reasons for small business success/failure		*							
14	Self-image building		*							
15	Cash management: working capital requirements	*								
16	Public relations		*							
17	Coping with change/ uncertainty/ambiguity		*							
18	Consumerism--trends/principles			*						
19	Unique aspects of family firms			*			*		*	**
20	Security issues			*						

(Table 37, continued)

Topic Number	Topic	<u>HYPOTHESIS 2</u>	<u>HYPOTHESIS 3</u>	<u>HYPOTHESIS 4</u>
		(Starters vs. Acquirers)	(Growth vs. Non-Growth)	Years w/Firm 1 Yr. or < vs. More Than 1
10	Cash management: cash flow principles; cash budgeting/forecasting		*	
11	Problems/operating strategies for specific business types		**	
12	The customer service function			
13	Reasons for small business success/failure			
14	Self-image building			
15	Cash management: working capital requirements		*	
16	Public relations			
17	Coping with change/ uncertainty/ambiguity			
18	Consumerism--trends/principles			
19	Unique aspects of family firms	**	*	
20	Security issues			

(Table 37, continued)

Topic Number	Topic	Overall Mean			HYPOTHESIS 1 (Entrepreneurial Types)					
		4.00+	3.50- 3.999	3.49-	D/B	D/L	D/M	B/L	B/M	L/M
21	Role/importance of small business			*						
22	Basic purchasing principles/ practices			*						
23	Goal setting: planning/ forecasting/budgeting		*							
24	Personal characteristics of successful entrepreneurs		*							
25	Pricing		*							
26	Periodic reviews of the organization			*						
27	Advertising campaigns		*							
28	Personal selling techniques		*						*	
29	Payrolls: Wage and salary administration		*							
30	Payrolls: preparation/tax and benefit laws		*							

(Table 37, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>HYPOTHESIS 2</u> <u>(Starters vs.</u> <u>Acquirers)</u>	<u>HYPOTHESIS 3</u> <u>(Growth vs.</u> <u>Non-Growth)</u>	<u>HYPOTHESIS 4</u> <u>Years w/Firm</u> <u>1 Yr. or < vs.</u> <u>More Than 1</u>
21	Role/importance of small business			
22	Basic purchasing principles/practices			
23	Goal setting: planning/forecasting/budgeting		*	
24	Personal characteristics of successful entrepreneurs	*		
25	Pricing			
26	Periodic reviews of the organization			
27	Advertising campaigns		*	
28	Personal selling techniques		**	
29	Payrolls: Wage and salary administration			
30	Payrolls: preparation/tax and benefit laws			

(Table 37, continued)

Topic Number	Topic	Overall Mean			HYPOTHESIS 1 (Entrepreneurial Types)					
		4.00+	3.50- 3.999	3.49-	D/B	D/I	D/M	B/I	B/M	I/M
31	Hiring practices/requirements		*							
32	Communications skills	*								
33	Designing/maintaining the accounting system		*							
34	Team building skills		*							
35	Calculating/understanding financial ratios			*						
36	Inventory control principles			*						
37	Determining/planning physical facilities			*						
38	Choosing form of ownership			*					**	
39	Training and development for employees		*							
40	Safety standards/practices		*							

(Table 37, continued)

<u>Topic Number</u>	<u>Topic</u>	<u>HYPOTHESIS 2</u> <u>(Starters vs.</u> <u>Acquirers)</u>	<u>HYPOTHESIS 3</u> <u>(Growth vs.</u> <u>Non-Growth)</u>	<u>HYPOTHESIS 4</u> <u>Years w/Firm</u> <u>1 Yr. or < vs.</u> <u>More Than 1</u>
31	Hiring practices/requirements		*	
32	Communications skills			
33	Designing/maintaining the accounting system			
34	Team building skills			
35	Calculating/understanding financial ratios			
36	Inventory control principles			*
37	Determining/planning physical facilities			
38	Choosing form of ownership		*	
39	Training and development for employees		*	
40	Safety standards/practices			

TABLE 38
TOPICS SHOWING SIGNIFICANT DIFFERENCES BETWEEN CELLS
(NULL HYPOTHESIS 5)

	<u>D-E</u>	<u>D-NE</u>	<u>B-E</u>	<u>B-NE</u>	<u>I-E</u>	<u>I-NE</u>	<u>M-E</u>	<u>M-NE</u>
D-E								
D-NE								
B-E								
B-NE								
I-E								
I-NE	5**, 27*							
M-E	19**				19**	19**		
M-NE	5*, 27*							

*Difference is significant at the .05 level

**Difference is significant at the .01 level

"Starter" versus "acquirer" entrepreneurs were the focus of Hypothesis 2. Significant differences were uncovered in the way these groups perceive the importance of Topics 19 and 24.

In Hypothesis 3, differences existed within 11 topics between growth-oriented and non-growth-oriented entrepreneurs. A t-test of grand means evinced higher ratings for topics in general by growth-oriented entrepreneurs.

Differences in perceptions of topic importance between those entrepreneurs with their current firm one year or less versus more than one year were tested in Hypothesis 4. Only Topic 36 ("Inventory control principles") was viewed differently by the two groups.

The effect of two categorical variables--type of entrepreneur and whether or not the entrepreneur had previously owned and/or managed a small business--on perceptions of topic importance were the subject of Hypothesis 5. Seven comparisons showed significant differences. These occurred within three topics: marketing planning (Topic 5); family firms (Topic 19); and development of advertising for the small firm (Topic 27).

Chapter 6 will summarize the study. Conclusions will be drawn, based on the findings presented herein. Some potential explanations for the phenomena reflected in this findings chapter will be offered. Recommendations for implementing the results of the study will be made.

CHAPTER 6

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to provide information for the development of effective small business management training programs. Surveying executives in small manufacturing companies in Iowa, Swanson (1990) found that entrepreneurs will participate in training they perceive as meaningful. Assessing differences in the perceptions of training needs among entrepreneurs can lead to training that is more precisely targeted. If such education is seen as more valuable, increased attendance should result.

This chapter will be divided into four parts. First, the premises, research methods, survey group characteristics, and findings will be summarized. Next, findings for all entrepreneurs and for contrasts between types will be analyzed, and conclusions drawn. Third, major findings and conclusions of the study will be discussed. Finally, implementation recommendations are offered.

Research Summary

Previous research has included entrepreneurial definition and typology development. Efforts have also outlined training needs for entrepreneurs in general. This inquiry has attempted to merge these two paths.

Central to this research was the development of an entrepreneurial classification scheme. A 2x2 Entrepreneurial Typology Matrix resulted from combinations of two dimensions

recurring in entrepreneurship literature. One dimension, new enterprise creation, stems from the work of Smith (1967), Begley and Boyd (1987) and Gartner (1988). According to these authors, the act of creating a new entity is central to the definition of entrepreneurship. The second dimension--a growth orientation--was posited by Dunkelberg and Cooper (1982b) and Carland, Carland, Hoy, and Boulton (1988), among others. These researchers categorize as "entrepreneurs" those who make major changes in the focus of their firms. The integration of these concepts was suggested by Hornaday (1991).

Four categories are illustrated in the Matrix. Developers are growth-oriented entrepreneurs who started their firms. Builders are growth-oriented but acquired their businesses. Initiators started their firms, but do not have a growth orientation. Maintainers are acquirers without a growth orientation.

Five research hypotheses were proposed, relating to significant differences in topic ratings between 1) the four types of entrepreneurs described above; 2) "starters" versus "acquirers;" 3) growth-oriented versus non-growth-oriented entrepreneurs; 4) those with one year or less experience with their firms versus those with more than one year; and 5) developers, builders, initiators, and maintainers with previous small business ownership/management experience versus those without.

A sample of 1,100 Oregon entrepreneurs was drawn from 68 Chamber of Commerce lists. Entrepreneurs responded to a 62-question survey divided into two parts. Part I was used to obtain data about

Oregon small business owner/managers. These small business owners and/or managers provided information about their philosophies and backgrounds. (Each was also placed in one of four entrepreneurial categories.) In Part II, entrepreneurs rated the importance of topics that can be included in small business management training programs. Respondents rated 40 topics on a 1-5 scale, with "5" representing "Very Important," and "1" corresponding to "Very Unimportant."

Usable responses were provided by 611 entrepreneurs (55.6%). Oregon entrepreneurs are predominantly male and well-educated. They tend to be first time entrepreneurs who have been with their current firms more than one year. The majority own/manage small firms (more than 80 percent employ 20 or fewer people) which are organized as corporations. These firms show a wide distribution of projected sales. Over 60 percent of the entrepreneurs have not participated in formal entrepreneurship training in the past year.

Mean topic rating scores were contrasted through analysis of variance (ANOVA). A Tukey's HSD multiple comparison test was run if topics showed significance at the .05 level. When four or fewer cells were to be compared, a Bonferroni test was run as a double check.

Thirty-one significant differences were found to exist between types of entrepreneurs. For each hypothesis, significant differences emerged for at least one topic. No more than five topics reflected such differences within any comparison of entrepreneurial types.

Conclusions

This section will expand upon the findings reported in the previous chapter. Conclusions will parallel the Chapter 5 format. First, topic ratings for the overall entrepreneur group will be analyzed. Differences among types of entrepreneurs will then be examined. Each of the five null hypotheses will be reiterated, with corresponding findings analyzed, conclusions drawn, and possible explanations offered.

Topic Ratings--All Entrepreneurs

Mean scores for all topics were reported in Table 10. Topic 12, relating to customer service, received the highest mean score (4.513) and had the smallest standard deviation. It is beyond question that the sample of small business owner/managers believes that customer service plays a key role in the firm's success.

T-tests of adjacent means indicate that Topic 12 and Topic 1 ("Motivating employees") are more important than other topics. Such tests also showed that the top five topics are perceived as being more important than the other 35 topics. Other topics in this group include Topic 2 ("Recordkeeping requirements"), Topic 4 ("Social responsibility/business ethics"), and Topic 10 ("Cash management: cash flow principles; cash budgeting/forecasting"). These findings partially confirm those of Carlson (1981), who found that customer service and recordkeeping topics ranked among the top five out of 50 topics.

Other topics with mean scores of over 4.00 (which corresponds with "Important" on the survey rating scale) pertained to problem

solving and decision making, managing working capital, marketing planning and strategy formulation, communications skills, and merchandise layout.

Hypothesis #1: Differences Among the Four Types

The first null hypothesis tested in this study was:

H_0 : There is no significant difference among the importance ratings of topics as rated by

- $H_{01}(a)$: developer versus builder entrepreneurs;
- $H_{01}(b)$: developer versus initiator entrepreneurs;
- $H_{01}(c)$: developer versus maintainer entrepreneurs;
- $H_{01}(d)$: builder versus initiator entrepreneurs;
- $H_{01}(e)$: builder versus maintainer entrepreneurs;
- $H_{01}(f)$: initiator versus maintainer entrepreneurs;

Significant differences were found to exist at the .05 level for five topics. For two topics (5 and 19) significant differences exist for several of the above comparisons.

Hypothesis 1.1. The first subhypothesis of H_0 tested was:

$H_{01}(a)$: There is no significant difference among the importance ratings of topics as rated by developer versus builder entrepreneurs.

No significant differences in mean scores were found between developer and builder entrepreneurs. There appears to be no meaningful difference in the way entrepreneurs who possess a growth orientation and started their own firm and those who are growth-oriented but acquired their businesses view the importance of the 40 topics presented within the context of small business management training.

Hypothesis 1.2. The second subhypothesis of H_0 tested was:

$H_{01}(b)$: There is no significant difference among the importance ratings of topics as rated by developer versus initiator entrepreneurs.

Both of these groups started their own firms, but developers have a growth orientation, while initiators do not. A significant difference at the .01 level was found for Topic 5 ("Developing marketing plans and strategies"). The mean for developer entrepreneurs was 4.275; for initiators, it was 3.883. Developers seem to see marketing planning as being much more positively related to the success of the firm than do initiators.

Hypothesis 1.3. The third subhypothesis of H_0 tested was:

$H_{01}(c)$: There is no significant difference among the importance ratings of topics as rated by developer versus maintainer entrepreneurs.

Maintainer entrepreneurs lack the growth orientation of developers. Nor did they start their own firms. Significant differences were found for two topics: 19 ("Unique aspects of family firms") and 28 ("Personal selling techniques"). The developer mean for Topic 19 was 3.578, versus 3.131 for maintainers. Not just developers--but builders and initiators as well--see this topic as much more important than do maintainers. This will be discussed below.

The mean scores for Topic 28 were 4.022 for developers and 3.645 for maintainers. Those starting their own firms and possessing a growth orientation see a significantly greater role for training in personal selling. Entrepreneurs working to see a firm through the early days of struggle or who want their firms to grow rapidly are more likely to realize the importance of representing their product and/or service on a personal level to potential customers.

Hypothesis 1.4. The fourth subhypothesis of $H_0 1$ tested was:

$H_0 1(d)$: There is no significant difference among the importance ratings of topics as rated by builder versus initiator entrepreneurs.

Topics 5 and 10 showed significant differences in mean scores between builders and initiators. Builders are growth-oriented and acquired their firms. Initiators are the opposite; they started their firms, but do not have a growth orientation. Differences for both topics are significant at the .05 level.

Topic 10 ("Cash management: cash flow principles; cash budgeting/forecasting") was the top-ranked topic among builder entrepreneurs. For an entrepreneur acquiring a firm and committed to its growth, the ability to obtain and efficiently utilize cash--obtaining loans for desired amounts, meeting repayment schedules and meeting other cash payment obligations, while minimizing unnecessary interest expense--can be a key to success. Owner/managers not as concerned about growth are likely to take fewer risks, utilizing cash as it becomes available from operations or other sources. Cash management is a less significant factor in their management equation.

Marketing planning (Topic 5) is also a key growth element. The ability to identify market needs and develop strategies to satisfy those needs is a key to sales and profit growth. Growth-oriented entrepreneurs figure to be more concerned with formalizing the process of developing new products and promoting their benefits.

Hypothesis 1.5. The fifth subhypothesis of $H_0 1$ tested was:

$H_0 1(e)$: There is no significant difference among the importance ratings of topics as rated by builder versus maintainer entrepreneurs.

Differences in mean scores between these two entrepreneurial types were significant for two topics. These are Topic 19 (family firms) and Topic 38 (form of business organization). Builder entrepreneurs see these topics as more important than do maintainers.

One (possible) explanation for the difference in means for Topic 38 is that builders, who are growth-oriented, face more situations where the advantages and disadvantages of various organizational forms (sole proprietorship, partnership, corporation) must be considered. As the firm grows, issues of capital acquisition, debt liability, profit/loss sharing, and the effect of decision making on market reaction time must be addressed. For firms in which growth is not an key concern, these factors are likely to be viewed as less important.

Hypothesis 1.6. The sixth subhypothesis of H_0 tested was:

$H_0(f)$: There is no significant difference among the importance ratings of topics as rated by initiator versus maintainer entrepreneurs.

The only topic for which a significant difference in mean scores occurred between these groups was Topic 19 (family firms). The difference between the two types is that initiators started their firms, while maintainers did not.

Topic 19 showed significant differences in all three comparisons involving maintainers. The difference between initiators and maintainers was the only one that was significant at the .01 level.

New firms are often begun as family enterprises. The owner, spouse, even the children participate in the venture. Decision

making may be shared among family members. The process of starting a new business, including decision making conflicts, often puts much strain on the family. Likewise, an enterprise oriented toward growth faces many of these same tensions. As the enterprise expands, grown children or other relatives may become a part of the management team. The potential for disruption of the "business family" and the actual family unit(s) participating in ownership and/or management grows as the fortunes of the firm ebb and flow. Thus, entrepreneurs who start their firms and/or are focused on growth (developers, builders, and initiators) are more likely to be affected by these events. Thus, they are apt to view the unique aspects of family firms as more important.

Hypothesis #2: Starters vs. Acquirers

The second null hypothesis tested in this study was:

- H₂: There are no significant differences in the ratings given to topics between entrepreneurs who started their own firms (developers and initiators) versus those who acquired their firms (builders and maintainers).

For "starter" versus "acquirer" entrepreneurs, there were statistically significant differences in mean scores for two topics. These were Topics 19 (family firms) and 24 ("Personal characteristics of successful entrepreneurs"). The difference for Topic 19 was significant at the .01 level.

Enterprise creation is, according to some (such as Smith, 1991), the prerequisite for "entrepreneurial" status. Thus, the findings of this study with respect to the difference in importance ratings between these groups for Topic 24 are not surprising. Those

starting a firm would want to know what characteristics are likely to enhance their success.

Some insight into the difference found between starters and acquirers for Topic 19 is provided by Dyer (1992). Most of the more than 70 entrepreneurs surveyed indicated less satisfaction with family relationships than with other aspects of their lives. He notes that family relationships and health may suffer because of the financial stresses involved in getting the firm through its precarious early days. Dyer further notes that,

"The entrepreneur, particularly in the early stages of the career, often must draw on family savings to start the business or finance new projects. This depletes the money available to the family, which does not have a regular, stable income to meet monthly expenses. Family members may have to give up such things as a new car, new furniture, or music lessons. Family members may overtly or covertly complain that the needs of the business seem to be more important than the needs of the family . . ."

"Starters"--who may have experienced these problems--are more likely to believe that training in this area can help alleviate some of the stresses (or at least help entrepreneurs understand them). The differences between maintainers and the other three types studied in the first null hypothesis also offer some explanation for this difference.

One may conclude that starters perceive the unique aspects of family firms and the characteristics of successful entrepreneurs as being more important than do acquirers.

Hypothesis #3: Growth-Oriented vs. Non Growth-Oriented

The third null hypothesis tested in this study was:

- H₃: There are no significant differences in the ratings given to topics between entrepreneurs who are growth-oriented (developers and builders) versus those who are not growth-oriented (initiators and maintainers).

Table 22 in Chapter 5 shows the 11 topics for which significant differences in mean scores were found to exist between growth-oriented and non-growth-oriented entrepreneurs.

Those topics for which such differences exist pertain to marketing planning/strategy development; cash management (both cash flow management and determining working capital requirements); problems and operating strategies for specific types of firms; family firms; goal setting; advertising; personal selling; hiring practices; choosing the form of business organization; and employee training/development. Growth-oriented entrepreneurs perceive these topics more positively than do owner/managers who are not growth-oriented.

To test for an overall pattern of higher ratings, a t-test was conducted on grand means for the 40 topics as rated by growth versus non-growth entrepreneurs. A significant difference between means existed. In general, growth-oriented entrepreneurs perceive training topics as being more important than do those who are not growth-oriented.

Hypothesis #4: One Year or Less With Firm vs. More Than One Year

The fourth null hypothesis tested in this study was:

- H₄: There are no significant differences in the ratings given to topics among entrepreneurs with one year or less small business management experience in their current firm versus those entrepreneurs with more than one year of experience.

A significant difference in mean scores between those entrepreneurs having one year or less experience with their current firm versus those with more than one year was found for one topic. The latter group perceives "Inventory control principles" (Topic 36) to be more important than does the former.

One explanation for this perception is that those in business more than one year have been through experiences with inventory losses and the need to match physical inventories with book figures. They are more likely to realize the effects of surpluses and shortages on sales and profits. When inventory items are not in stock, customers are likely to perceive the firm negatively. They may become sufficiently annoyed to take business elsewhere. In light of the tremendous importance attached to Topic 12, the customer service topic, actual experiences with such situations would lead entrepreneurs to view inventory control as more important than would owner/managers whose similar experiences are likely to be less frequent.

Hypothesis #5: Previous Small Business Management Experience Levels

The fifth null hypothesis tested in this study was:

- H 5: There are no significant differences in the ratings
 - o given to topics among developer, builder, initiator, and maintainer entrepreneurs who have previously owned a firm versus those who are managing their first small business.

Seven instances of significant differences in cell mean scores for training topics were discovered when type of entrepreneur and the extent of previous experience were the independent variables. The seven comparisons occurred within three topics. These were

Topics 5 (marketing planning); 19 (family firms); and 27 (advertising).

Table 38 indicates that these significant differences are grouped into two areas: between developers with previous small business management experience and non-growth-oriented entrepreneurs without it; and between those entrepreneurs who had started their own firms and non-growth-oriented entrepreneurs who did not. The latter contrast revealed three instances of significant differences. All involved Topic 19.

For Topics 5 and 27, perceptions of developers with previous experience varied substantially from those of non-growth-oriented entrepreneurs (builders and maintainers) without any experience. This finding may shed additional light on the significant differences shown between growth-oriented and non-growth-oriented entrepreneurs for these two topics in Hypothesis 3. One explanation for this phenomenon may be that developer entrepreneurs with previous management experience realize the value of developing marketing (and, specifically, promotional) strategies. The rationale for the marketing function is that the development of strategies concerning product, price, place, and promotion better enables firms to meet the needs of customers. Hypothesis 3 showed that growth-oriented entrepreneurs perceive marketing planning as being more important than do their non-growth-oriented counterparts. "Starters" who strive to make their firms grow learn through experience that marketing planning helps them achieve this growth. Those who have not started a firm and are not growth orientated, and

who have not previously owned and/or managed a small business, may not have come to see the value of such planning.

The three significant comparisons found within Topic 19 offer a further explanation the findings in Hypothesis 1. Material differences were shown in perceptions between developer, builder, and initiator entrepreneurs versus maintainers where family firms are concerned. Maintainers with experience see training in the unique problems relating to family firms as substantially less important than do developers with previous experience and initiators both with and without it. These maintainers apparently believe that educational efforts will neither prevent problems nor help the owner/manager overcome those already present.

The presence of interaction for this topic indicates that the individual independent variables by themselves do not explain a significant part of these perceptual discrepancies. It may be that, having previously managed a firm, maintainers have not found a type of training that is useful in overcoming the complex and varied problems associated with family-run firms. Such training may have been ineffective. It may also not have been provided. In either event, a skepticism about training on the part of maintainers who have had to "fight through" family business problems may be present, whereas those who are newer to small business management may not have developed such skepticism.

Previous experience by itself clearly is not a factor in perceived differences about the importance of family business training. Topic 19 is not found among the list of those topics in

Table 33 for which significant differences were found between those with and those without previous experience.

However, a potential explanation for the interaction does exist. Family business problems are likely to either arise or be exacerbated by the stress caused by risky situations. Starting a firm and guiding it through early stages of peril is one of these. So is substantial expansion of the firm's sales and scale of operations. Maintainers encounter neither of these. They are less likely to deal with the renting of the family's social fabric that accompanies such risks. Those with experience may conclude that, since they have previously run a small firm and have not had to deal with the range of family problems that face developers, builders, and initiators, they are not likely to. Training in this area would be of little use to them. On the other hand, maintainers without previous experience are less likely to realize this. They may still believe that training will help them ward off future problems.

Major Findings/Conclusions of the Study

In general, relatively few topics were found to show significant differences between entrepreneurial types. This was true when four categories of one independent variable were related to topic means (Hypothesis 1); when a one-way ANOVA was performed on topic means for only two categories of one independent variable (Hypotheses 2, 3, and 4); and when eight comparisons were done within the context of two independent variables (Hypothesis 5). Little evidence suggests a strong relationship between type of entrepreneur and differences in perceptions of the importance of

various topics that can be included in small business management training programs.

There is not, however, an absence of meaningful findings. When training is to be topic-specific, there is some evidence, based on this study's findings, that some types of entrepreneurs may already perceive that topic to be of greater value. The opposite may also be true; it may be necessary to educate some types of entrepreneurs about the potential contribution of some business and management subjects to their potential management success.

Regrouping the 40 topics on the final questionnaire in the same manner as was done on the initial (170-item) topic survey provides the clusters shown in Table 39. (This survey was used to weed the list down to a more manageable number. Sixty topics were included on the field test surveys. This number was reduced to the final 40.) This table also shows the number of significant comparisons occurring for each topic.

The few significant differences found within accounting topics, and the relatively large number of differences in the marketing area support Nelson's (1983) findings. This researcher examined differences in importance levels with regard to gender, employment levels, franchised firms, and years of experience. Two studies do not constitute sufficient evidence with which to draw firm conclusions. However, it appears that, for many groupings of entrepreneurs, accounting topics are perceived similarly, while differences in perceived importance exist for marketing topics.

TABLE 39
DISTRIBUTION OF TOPICS BY MANAGEMENT FUNCTION/SUBJECT AREA
(Includes Number of Significant Comparisons By Area and Topic)

<u>Area</u>	<u>Topic Number</u>	<u>Topic</u>	<u>Number of Significant Comparisons</u>
SMALL BUSINESS MANAGEMENT ENVIRONMENT	6	Basic Economic principles	-
	11	Problems and operating strategies for specific business types	1
	13	Reasons for small business success/failure	-
	17	Coping with change/uncertainty/ambiguity	-
	21	Role and Importance of Small Business in the American Economy	-
PREPARATION FOR SMALL BUSINESS MANAGEMENT	9	Problem solving/decision making techniques	-
	14	Self-image building for the small bus. owner	-
	19	Unique aspects of family firms	8
	24	Personal characteristics of successful entrepreneurs	1
MANAGEMENT PRINCIPLES	23	Goal setting: principles of planning/ budgeting	1
	26	Periodic reviews of the organization	-
PERSONNEL MANAGEMENT	1	Motivating employees	-
	7	Evaluation of employees	-
	29	Payrolls: wage and salary administration	-
	31	Hiring practices/requirements	1

(Table 39, continued)

<u>Area</u>	<u>Topic Number</u>	<u>Topic</u>	<u>Number of Significant Comparisons</u>
(PERSONNEL MGMT., CONT.)	32	Communications skills	-
	34	Team building skills	-
	39	Training and development for employees	1
MARKETING	5	Developing marketing plans/strategies	6
	25	Pricing	-
	27	Advertising campaigns for the small firm	4
	28	Personal selling techniques	1
FINANCE/ BANKING	10	Cash management: cash flow principles; cash budgeting/forecasting	2
	15	Cash management: figuring working capital requirements	1
	35	Calculating/understanding the use of financial ratios	-
	36	Inventory control principles	1
ACCOUNTING/ RECORDKEEPING	2	Recordkeeping requirements	-
	8	Understanding/interpreting financial statements	-
	30	Payrolls: preparation/tax laws/benefit requirements	-
	33	Designing/establishing/maintaining the accounting system	-

(Table 39, continued)

<u>Area</u>	<u>Topic Number</u>	<u>Topic</u>	<u>Number of Significant Comparisons</u>
PURCHASING/ MANUFACTURING PROCESSES	22	Basic purchasing principles/practices	-
LEGAL ENVIRONMENT/ GOVERNMENT RELATIONS	38	Choosing form of ownership	2
FACILITIES/ SECURITY	3	Merchandise layout	-
	20	Security issues: theft/embezzlement/ shoplifting/robbery	-
	37	Determining/planning physical facilities	-
SMALL BUSINESS & SOCIETY	4	Social responsibility/business ethics	-
	16	Public relations	1
	18	Consumerism--trends/principles	-
MISCELLANEOUS SMALL BUSINESS MANAGEMENT ISSUES	12	The customer service function	-
	40	Safety standards/practices	-

Five major substantive conclusions can be supported by the statistical evidence in this study. These relate to 1) marketing topics; 2) growth-oriented entrepreneurs; 3) "starter" entrepreneurs and previous work in typology development; 4) the relationship between promotion and previous small business management experience; and 5) family firms.

Marketing Topics. More significant comparisons between group means were found for marketing topics than for any other topical area. Eleven of the thirty-one comparisons showing significant differences occurred within Topics 5, 27, and 28. These topics concern marketing planning, advertising, and personal selling. Of the four marketing topics, these are the three which are most readily identified with marketing. Of the marketing topics, only Topic 25 ("Pricing") did not show any differences between types.

Previous research has shown that small business managers value marketing training. Swanson (1988) asked entrepreneurs to rate 41 topics on whether or not the information would be useful in two or three years. Two marketing topics--new markets and new product development--placed first and third respectively among those who answered "Yes." Results herein imply that certain types of entrepreneurs value such training more highly than do others.

Growth-oriented Entrepreneurs. In 11 cases, significant differences in perceptions of training value were found between those entrepreneurs who are growth-oriented and those who are not. These differences cover a multitude of topics. Seven of the twelve topic areas in Table 39 are represented. The likelihood of Type I

error was no more than .03 for any topic; thus, there is more than just technical statistical significance involved. Over 35 percent of the significant comparisons in this study were found here.

A t-test also determined that growth-oriented entrepreneurs have a more positive attitude toward training topics in general. One may infer that such entrepreneurs are more likely to acknowledge a relationship between small business management training and sales/profit growth than are their counterparts who focus less on growth.

"Starter" Entrepreneurs and Typology Development. Much attention has been devoted in the entrepreneurship literature to the debate over "who is" versus "who is not" an entrepreneur. One recurring theme (Smith, 1991; Miner, Smith, and Bracker, 1992) is that, to be an entrepreneur, one must be the founder of a firm.

For this distinction to be meaningful, it must have operational significance. There must be a difference in the way "starters" and "acquirers" behave. This study does not pretend to speak to all elements of entrepreneurship, or to entrepreneurs in all geographic areas. However, significant differences were found for only two topics in Hypothesis 2. This lack of significant differences does not indicate that this dimension is particularly meaningful among Oregon entrepreneurs rating training topics.

Mass Promotion and the Experienced Entrepreneur. Those possessing previous small business ownership/management experience view mass promotion as being more important than do those without such experience. When previous experience was considered as a singular categorical variable, significant differences were

revealed for three topics. One of these was Topic 5 ("Developing marketing plans/strategies"). The other two involved a subset of marketing planning: mass promotion. Topics 16 ("Public Relations") and 27 ("Advertising campaigns for small firms") were the only two topics in the study which concerned promoting the firm to the general public and/or to specific markets. Topic 16 involves developing the firm's overall image; Topic 27 with communication of product/service benefits and features to target market segments. The lack of significant differences among other topics leads to the conclusion that an important difference between entrepreneurs with previous experience and those without is the difference in the perceived value of mass promotion.

Family Firms. Eight significant differences in mean score comparisons were found for Topic 19 ("Unique aspects of family firms"). This was the greatest number of significant differences for any topic in the survey. Such differences in perceived importance exist within all but one hypothesis: Null hypothesis 4 (years with firm).

The striking difference in perceptions between developers, builders, and initiators on the one hand and maintainers on the other, as evinced by the probability levels shown in the paired comparison tests, leaves little doubt that substantive differences exist between the groups with regard to the value of training for solution and/or minimization of family business problems.

If certain types of entrepreneurs are more affected by the stresses and strains of family firms than are others, such

differences are explained, to some extent, by Dyer (1992). He speculates that norms differ between family and business systems with regard to five potential conflict areas: 1) goals; 2) relationships; 3) rules; 4) evaluation; and 5) succession. Within the family business setting, the lines blur between "family" and "business" objectives, expectations, and behaviors. The acts of initiating or expanding a family firm are likely to provide a unique "greenhouse" for the development of problems in both arenas. Certain types of entrepreneurs are more susceptible to these problems; hence, they may tend to rate this topic more positively.

Other explanations for these differences have been discussed previously and will not be reprised here.

Implementation Recommendations

The problem researched in this study was:

What are the training needs of selected types of entrepreneurs, how do they differ among types, and how are these needs affected by relevant entrepreneur characteristics such as length of time managing the current firm and previous small business management experience?

Topic ratings (in the form of mean scores) and rankings for entrepreneurs as a group were shown in Table 11. Appendix 6 includes ten tables (A.1 through A.10) which segment this information by type of entrepreneur for each of the first four hypotheses tested. Table 24 includes ratings and rankings for the eight cells tested in Hypothesis 5.

Thirty-one significant contrasts among types of entrepreneurs were discovered. These differences were noted and explained earlier

in this chapter. In general, entrepreneurs perceived their training needs similarly. Such characteristics as length of time with the current firm and previous ownership/management experience had little impact on training needs perceptions.

Based on the findings and conclusions of this study, 14 recommendations are offered. These relate to training program organization and content.

1. Training programs offered to undifferentiated groups of Oregon entrepreneurs should include instruction in the following subjects:

- a. Customer Service
- b. Employee Motivation
- c. Recordkeeping Requirements for the Small Firm
- d. Social Responsibility and Business Ethics
- e. Cash Management: Cash Flow Principles and
and Cash Budgeting/Forecasting

These topics were perceived to be more important than the other 35 topics rated by 611 Oregon entrepreneurs.

2. The following topics, which also scored in the upper half of the statistical range corresponding to "important," might also be included in a general small business management training program.

- a. Problem Solving & Decision Making Techniques
- b. Cash Management: Working Capital Requirements
- c. Marketing Planning and Strategy Formulation
- d. Communications Skills
- e. Merchandise Layout

3. In the absence of knowledge about the composition of a group of entrepreneurs, a "generic" small business management training program should be offered. This program should include topics such as those noted above.

4. Those participating in small business management training programs focusing on marketing planning, cash management, family firms, personal selling, or organizational form options should be given an instrument which will allow the trainer to classify participants according to entrepreneurial type. Different types of entrepreneurs have varying perceptions of the importance of these areas. Trainers can tailor their approach based on the extent to which the types who have differing perceptions are present and can be identified.

5. Trainers should determine whether entrepreneurs have or have not started their own firms. This is particularly important when the educational program involves a study of family firms or the personal characteristics of successful entrepreneurs.

6. A classification instrument should be given to training participants to determine the numbers of growth-oriented versus non-growth-oriented entrepreneurs. Many topics are more important to those who are growth-oriented. If the training institution wishes to attract those who are growth-oriented, a program might be designed which focuses on the 11 topics noted in Table 22.

7. Programs concerning inventory control should be targeted to retailers and/or wholesalers who have been with their current firm more than one year. Special efforts should be made to persuade newer entrepreneurs that knowledge of this topic is valuable.

8. Marketing planning and advertising program participants should be categorized to determine the presence of developer entrepreneurs with previous experience versus non-growth-oriented

entrepreneurs without any. Trainers promoting programs focusing on these topics should target experienced developers. This group perceives the topics more positively than do others. If many non-growth-oriented entrepreneurs are involved, efforts should be made to "sell" the importance of the information to this group.

9. Marketing programs for small business should be advertised to growth-oriented entrepreneurs. (Though, identifying these people may be a problem!) This group demonstrates more interest in marketing topics than do several entrepreneurial categories comprised of those who are not growth-oriented.

10. The importance of marketing in helping the entrepreneur achieve higher levels of business growth needs to be emphasized to the large majority of owner/managers who do not focus on growth. This group's relatively negative perception of the importance of the marketing function in small business may be improved if training agencies work to make members of this group aware of potential benefits from the effective application of marketing techniques.

11. Programs emphasizing mass promotion techniques should be aimed at entrepreneurs with previous ownership/management experience if the goal is to maximize interest and attendance.

12. The benefits of instruction in mass promotion techniques should be emphasized to entrepreneurs without previous experience. If a training program includes mass promotion as a significant element, and many of the participants do not have prior experience, special efforts may be necessary to make these entrepreneurs aware of the potential rewards from the effective use of mass promotion.

13. Small business management educators conducting training programs focusing on aspects of family firms should categorize members of the student/entrepreneur group along the major dimensions used in this study. The great difference in perceptions between developers, builders, and initiators versus maintainers militates in favor of different approaches for the two groups. The former three entrepreneurial types are likely to face a greater range of problems relating to family firms. Training might include the following:

- a. the identification of potential problems inherent in the initial stages of the firm;
- b. means of conflict resolution among family members present within the ownership/management structure of a firm;
- c. techniques for managing the expansion of the firm while minimizing stress among family members;
- d. potential problems in the transfer of ownership and/or management between generations; and
- e. ways to most effectively utilize both family members and outsiders at various management levels.

14. Designers of entrepreneurship training programs should use the topic ratings for various types of entrepreneurs in Appendix 6. If tests show a preponderance of one or more types, topics of interest to the type(s) of entrepreneur(s) in attendance should be included. If other topics are covered, or if training topics are aimed at those entrepreneurs not perceiving them as relevant, efforts must be made to "sell" the importance of those topics.

Chapter Summary

Entrepreneurs are more likely to participate in training they perceive as meaningful. This study provided information about

differences in perceived importance of 40 training topics among small business owner/managers.

Five hypotheses were tested. Results show that developer, builder, initiator, and maintainer entrepreneurs perceive the relevance of five topics differently. Marketing planning and strategy formulation, the unique aspects of family firms, cash flow principles and cash budgeting, personal selling, and organizational form options are rated differently by various types of entrepreneurs.

Few differences were discovered between entrepreneurial types for "starter" versus "acquirer" entrepreneurs and for those who have been with their current firm one year or less versus more than one year.

Growth-oriented entrepreneurs perceived eleven topics as being more important than did those without a growth orientation. The former also tended to perceive training topics more positively.

Developers with previous small business management experience perceived marketing planning and the development of advertising for the small firm as being more important than did non-growth-oriented entrepreneurs without such background. The value of training in family firms was viewed less positively by maintainer entrepreneurs with previous experience than by starter entrepreneurs (except developers without experience).

Five major conclusions were discussed. These concerned 1) differing perceptions of the importance of marketing topics; 2) the substantial incidence of topics seen as relatively important by

growth-oriented entrepreneurs; 3) the lack of support for previous studies showing the founding of a firm as a significant dimension in entrepreneurial definition; 4) the value placed on mass promotion by entrepreneurs with previous small business management experience; and 5) differences in perceptions about the value of training in the aspects of family firms.

Based on these conclusions, 14 implementation recommendations were offered.

The study will conclude in Chapter 7 with a brief discussion of the implications of the study for program planning and further research.

CHAPTER 7

IMPLICATIONS FOR PROGRAMS AND FURTHER RESEARCH

The findings and conclusions of this study have implications for entrepreneurial training programs. Further research into this subject can clarify and supplement this knowledge.

This final chapter will describe some program planning considerations. Relevant programs direct pertinent topics to interested groups. Identifying differences in training needs perceptions among groups facilitates this targeting. Chapters 5 and 6 pinpoint the location of such differences.

Suggestions for related research will also be offered. In several ways, this study represented a pioneering effort. As such, many avenues for further exploration are indicated.

Program Development Implications

Relatively few meaningful differences in perceived importance of training topics were found among entrepreneurial types. Out of 200 ANOVA tests conducted, approximately ten percent showed significance. Differences were topic- and/or type-specific. However, where differences in perceptions between groups do exist, there are substantial implications for program planning.

For many topics and subject areas, organizers of small business management training can direct their efforts to a general audience. Little consideration need be given to the incidence of different entrepreneurial types in the potential audience. Programs dealing

with accounting and recordkeeping for the small firm, facilities and security, customer service, purchasing, or safety require can virtually disregard this factor.

Slight attention may be necessary when training involves the small business management environment, small business and society, management principles, or personnel management. Entrepreneurs perceived the value of training in these areas similarly.

However, determining the presence of various entrepreneurial types is more crucial when training involves marketing, finance and banking, available choices in organizational forms, or aspects of family firms. Program developers need to determine the extent to which various categories of entrepreneurs are present within the geographic area. This will allow planners to more accurately gauge potential interest in the subject, promoting instruction to those who can benefit most. Once participants are identified, course organizers should survey them to assess their backgrounds and interest levels. Strategies can be devised to motivate those who attach lesser importance to the topic. Other approaches will be suggested if many students have more positive perceptions.

Readers should note that differences do not imply that one group perceives a subject as "important" while another necessarily sees it as "unimportant." All entrepreneurial types perceived some topics as being meaningful to the small business manager. For other topics, though differences may or may not have existed between groups, entrepreneurs generally perceived the topic as being much

less useful. The instructor's task becomes more complex when substantial differences in perceived importance levels exist.

Program planners should seek to determine the reasons for relatively negative perceptions of topics. (For example, those topics in the lower quartile of the rankings for all entrepreneurs or for specific types.) Do entrepreneurs' experiences lead them to conclude that instruction is not useful? Or are they not aware of the potential uses of the knowledge? Different courses of action are indicated in these two situations.

Substantial opportunities exist for building enrollments when negative perceptions of topic value can be overcome. As is true for products and services, effective program marketing includes developing awareness of "needs" people may not have known they had. As the training agency convinces entrepreneurs that they will benefit from knowing more about one or more small business management subjects, the training program market will expand.

Recommendations for Further Research

When research in any field moves in a new direction, as many questions are raised as answered. This study is no exception. As a first step into the area of targeting small business management training programs according to entrepreneurial type, many future directions for research are suggested. The recommendations below, while not exhaustive, are potentially interesting examples.

1. Replication of research in the social sciences is a route not followed often enough. With more than 30 significant comparisons, replication using a different sample is suggested. A

national sample, using (for example) the National Federation of Independent Business membership list would provide a chance to substantiate or refute inferences drawn herein. NFIB tends to include more manufacturers and larger "small businesses" than does the typical Chamber of Commerce. Surveying a sample of this national organization's membership would expand the population to which findings can be generalized. So would replicating the study with Chamber of Commerce lists in other states or regions.

2. Testing urban versus rural entrepreneurs might reveal possible geographic differences in the perceived importance of potential training topics. Surveying small business owner/managers in large states, with their more varied economic base, versus those in small states, in which a few large industries often dominate, might also indicate the presence of such differences. This information can be very useful to those planning programs--especially for entrepreneurs in less-populated regions.

3. Oregon entrepreneurs are, on the whole, a fairly well-educated lot. Testing for differences in training needs by educational level may help program developers form groups of entrepreneurs with similar backgrounds. For example, entrepreneurs who successfully majored in business administration likely share some common course work. A program built upon this background, requiring at most a brief review of many topics, can move more quickly into advanced topics.

4. Other demographic variables provide a basis for further research. Many high school programs seek to encourage young

entrepreneurs. Other sources emphasize opportunities for women. Executive Females features a regular section offering tips for female entrepreneurs. Specifically testing for differences in perceptions of training needs within demographic groups also facilitates successful targeting of entrepreneurship training.

5. This study looked at the effect of previous small business management experience on training needs perceptions. But what about differences stemming from experience in small businesses versus that managing of larger enterprises? Is management experience the important factor, or is there something unique to managing the small firm? Research can help provide the answer.

6. Training needs in specific areas--accounting, marketing, information processing--would provide information for those planning programs with a narrower topic focus. This study determined that substantial differences exist for marketing topics. But is this true of marketing topics in general? Only those related to mass promotion? Promotion in general? Surveying entrepreneurs about a broad range of marketing subjects would help those teaching marketing to small business managers. This same approach extends to program planning for other subject areas.

7. The findings relating to family firms beg further study. What makes maintainers so different from the other three types? Why did only those maintainers with previous experience perceive training in this area as significantly less important? Since so many firms are family firms, research that would determine the reasons for these generally negative perceptions might suggest ways to make the topic more relevant for maintainers.

8. Research might also focus on the way training programs are organized and instruction delivered. Small Business Development Centers (SBDCs) provide consulting services to small business. The SBDC network is growing. Do the directors of these organizations correctly perceive the training needs of various categories of entrepreneurs? Further study can tell us whether SBDC directors accurately gauge the perceptions of their clientele. Consultants who are "in tune" with clients' perceived needs can more easily determine the degree to which those clients must be motivated to learn specific topics.

9. Do entrepreneurs' learning styles affect training needs perceptions? Small business managers may prefer different learning styles. For example, accounting--a highly structured and linear discipline--might be perceived negatively by those entrepreneurs who enjoy learning subjects that are more gray than black and white.

Are lectures more effective because they are more concrete? Or, would the imprecision and randomness inherent in case studies and open-ended exploration be more enjoyable and productive for entrepreneurs, for whom ambiguity and uncertainty represent everyday challenges?

Research should examine specific environmental variables. Does variability in physical settings (e.g., temperatures, types of seating, presence or food or drink) affect motivation and retention? What group sizes are most productive--or is individual study best? Research can help answer many of these questions.

10. Another area is related to learning styles. Does information search capability (willingness and ability to use

consultants or other resources) affect training needs perceptions? Research can determine correlations between the tendency to employ outside information resources and positive perceptions of training in general and specific topics in particular.

Obviously, many more avenues of exploration are possible. The above list is offered to stimulate thought about potential research topics. If the list (or any part of this study) provides the impetus for further study leading to more efficient and effective entrepreneurship training, this researcher believes that the entire effort will have been worthwhile.

Summary

This short final chapter discussed implications for program planning and related research.

Those planning entrepreneurship training need to consider entrepreneurial type as a situational variable when developing programs. How useful this knowledge will be to planners depends on the topic(s) or subject area(s) to be included in the training effort. Few, if any, differences in perceptions are present between groups for some topics or areas. Much more attention must be paid to this variable when training covers other areas--such as marketing/promotion, family firms, and finance/banking.

In conclusion, this study has suggested many potential avenues of interesting research. Such additional knowledge can significantly contribute to the growing body of knowledge in the field of small business management and entrepreneurship training.

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APPENDICES

APPENDIX 1

COVER LETTER AND 170-ITEM QUESTIONNAIRE

APPENDIX 1
COVER LETTER AND 170-ITEM QUESTIONNAIRE

March 25, 1991

To: Business Managers Completing Management Training Survey #1

Dear Respondent:

Your help is very much needed with an important project. Are you able to give me a few minutes of your time in order to help improve the quality of education for managers of the nation's many small firms?

I am currently working on a Ph.D. degree at Oregon State University. My research involves determining the training needs of entrepreneurs and small business owner/managers; specifically, how they are alike and how they differ. This study requires several steps--one of which is the construction of a questionnaire that will be sent at random to owners of small firms.

The questionnaire you are being asked to complete is the first step in this process. With your help and that of a few other selected individuals, the 170 topics listed within will be narrowed down to a smaller number for the final survey. To maximize the value of small business management training, educators need to focus on those topics entrepreneurs want--and need--to study. Your honest opinions are very important, and will have an impact on the direction of this research. When rating these topics, you might want to ask yourself this question:

To what extent will knowing more about this topic improve the chances of success for managers of small firms?

In addition to checking the appropriate column for each topic (and please DO RATE EACH TOPIC!), please also feel free to note items which are not clear or seem to duplicate other items. Please also note any topics which you believe have been omitted and any ideas you have for improvement of the questionnaire in general. (This can be done in the margins or on the back of the survey.)

Your prompt and thoughtful completion of this survey will be very much appreciated. If you have any questions, feel free to contact me at Waldport High School during the work day (563-3243) or at home in the evenings (997-8507). Once again, thank you for agreeing to participate.

Bruce E. Herbert
Ph.D. Candidate
Oregon State University

SMALL BUSINESS TRAINING QUESTIONNAIRE

Directions: Below are a number of topics that could be part of a training program for managers of new and ongoing small businesses. Indicate YOUR opinion about the importance of each topic by checking the appropriate column to the right of that topic. Use the scale below to indicate your opinion:

- 5 = Very Important
- 4 = Important
- 3 = Of Average Importance
- 2 = Relatively Unimportant
- 1 = Very Unimportant

	(Possible):	POINTS (90)	MEAN (5.00)
THE SMALL BUSINESS MANAGEMENT ENVIRONMENT			
1. The role and importance of small business in the American economy		74	4.11
2. Factors in small business success/failure		78	4.33
3. Basic economic principles (supply and demand, types of competition, etc.)		70	3.89
4. Economics: Monetary (money supply) and fiscal (tax) policies		59	3.28
5. Finding and analyzing potential business opportunities		73	4.06
6. Techniques for analyzing competitors		58	3.22
7. Evaluation of existing businesses for possible purchase		64	3.56
8. Operating problems/techniques for specific classes of businesses (retail, manufact., service)		72	4.00
9. Coping with change, ill-defined situations, uncertainty, and ambiguity		67	3.72
PREPARATION FOR SMALL BUSINESS MANAGEMENT			
10. Building the entrepreneurial team (owners, investors/venture capitalists, creditors, suppliers)		74	4.11
11. Small Business information sources (sources of aid; info about starting/managing small firm)		64	3.56
12. Services/aids available from the SBA, Chambers of Commerce		53	2.94
13. Effective utilization of professional consulting services (lawyers, bankers, accountants, etc.)		68	3.78
14. Problem solving/decision making techniques		71	3.94
15. Fostering creativity/innovation		69	3.83
16. Steps in the organization and establishment of new businesses		75	4.17
17. Preparing business plans for new ventures		70	3.89
18. Skills, capital and time requirements necessary to operate a small business		81	4.50

	POINTS	MEAN
19. Unique aspects of family firms--time demands/relationships/etc.	68	3.78
20. Personal characteristics of successful entrepreneurs (self-motivation, etc.)	69	3.83
21. Self-image building for small business owners	68	3.78
22. Self-assessment of one's suitability for small business management	75	4.17

MANAGEMENT PRINCIPLES

23. Goal setting and techniques of implementing/reaching goals (MBO, etc.)	74	4.11
24. Budgeting techniques	75	4.17
25. Options in organizational structure (line, line & staff, matrix, etc.)	55	3.06
26. Principles of management (planning, organizing, directing, delegating, controlling)	71	3.94
27. Periodic reviews of the organization (how and how often to conduct: internal auditing)	67	3.72
28. Strategy and policy development for the small firm	70	3.89
29. Principles of long-range planning, forecasting, and budgeting	68	3.78
30. Statistics and other quantitative techniques as applied to management decision making	48	2.67
31. Time management principles/methods	63	3.50

PERSONNEL MANAGEMENT

32. Hiring practices/requirements (including knowledge of anti-discrimination laws)	71	3.94
33. Motivating employees	77	4.28
34. Scheduling of work	68	3.78
35. Training and development for employees (options available: costs/benefits)	70	3.89
36. Wage and salary determination	64	3.56
37. Labor relations	62	3.44
38. Evaluation of employees	67	3.72
39. Union relations, negotiations, collective bargaining principles	45	2.50
40. Grievance procedures	52	2.89
41. Communications skills (interpret policies to workers, encouraging employee input, etc.)	74	4.11
42. Determining supplemental benefits (advantages/disadvantages of various options)	53	2.94
43. Team building skills	70	3.89
44. Recordkeeping requirements	78	4.33
45. Conducting effective and efficient meetings	61	3.39

	POINTS	MEAN
MARKETING		
46. Analyzing others' marketing strategies/marketing theory applications	51	2.83
47. Developing marketing plans/strategies	72	4.00
48. Determining the product/service mix	65	3.61
49. Consumer behavior (assessing buying habits; determining appeals to target markets)	66	3.67
50. Understanding target marketing	67	3.72
51. Demographics/Psychographics (categorizing customers; utilizing lifestyle profiles)	58	3.22
52. General advertising principles (options available in terms of media, appeals, etc.)	71	3.94
53. Budgeting/evaluating advertising	76	4.22
54. Planning and scheduling advertising campaigns	69	3.83
55. Principles of print advertising layout	60	3.33
56. Personal selling techniques	72	4.00
57. Sales promotion techniques (plan/organize displays and other promotional media)	67	3.72
58. Distribution channels/options	53	2.94
59. Market research techniques (surveys, test marketing, etc.)	50	2.78
60. Uses of mail order, understanding costs/benefits of direct mail campaigns	51	2.83
61. Basic methods of pricing -- establishing pricing policies	75	4.17
62. Basic methods of pricing -- calculating prices (markups, markdowns, etc.)	70	3.89
63. Product development--improving existing products or inventing new ones	66	3.67
64. Understanding the product life cycle concept	57	3.17
65. Sales forecasting (determining extent of product market, market share, etc.)	67	3.72
66. Assessing sales trends/seasonal fluctuations and impact on marketing strategy	65	3.61
67. Cash/trade discounts: when to use	62	3.44
68. Cash/trade discounts: how to calculate	59	3.28
FINANCE AND BANKING		
69. Recognizing/analyzing short- and long-term capital requirements	75	4.17
70. Allocating capital (how to decide optimum capital allocation for various projects)	73	4.06
71. Methods of acquiring capital (debt vs. equity, advant./disadvant. of venture capitalists, etc.)	76	4.22
72. Preparing loan packages and applications	72	4.00

	POINTS	MEAN
73. Determining optimum amounts to borrow and negotiating terms with bankers/other lenders	71	3.94
74. Understanding positive and negative covenants of loan agreements	64	3.56
75. Determining collateral needs	66	3.67
76. Utilizing less conventional financing sources (absentee investors, silent partners, etc.)	57	3.17
77. Understanding banking requirements and utilizing the banking system	68	3.78
78. Cash management: Figuring working capital requirements	80	4.46
79. Cash management: Principles of cash flow/cash management	82	4.56
80. Cash management: Cash budgeting and forecasting	78	4.33
81. Calculating break-even analyses/graphing when preparing financial packages	65	3.61
<u>82-87. Performing financial statement analyses:</u>		
82. Profitability ratios (return on investment, return on sales, etc.)	71	3.94
83. Liquidity ratios (quick ratio, current ratio, receivables turnover, etc.)	66	3.67
84. Borrowing capacity ratios (debt to equity ratio, etc.)	67	3.72
85. Determining industry standards for ratios and other measures of financial performance	61	3.39
86. Understanding trend analyses (ratio trends; revenue and expense trends, etc.)	68	3.78
87. Interpreting component percentage financial statements (costs as percentage of sales, etc.)	64	3.56
88. Evaluating investments in small firms using return on investment analysis	57	3.17
89. Inventory control principles (including merchandise inventory turnover calculations)	72	4.00
90. Principles of credit and collection systems (Determining optimal accts. rec. balance)	61	3.39
91. Assessing creditworthiness	64	3.56
92. Managing Fixed Assets (equipment, buildings, vehicles, etc.)	66	3.67
ACCOUNTING/RECORDKEEPING		
93. Designing, establishing, and maintaining bookkeeping/accounting system	80	4.46
94. Basic methods of controlling costs of sales and/or production	72	4.00
95. Understanding inventory valuation options	58	3.22
96. Calculating inventory values using FIFO, LIFO, Average Cost, Retail methods	56	3.11
97. Understanding/interpreting financial statements	72	4.00
98. Preparing financial statements	62	3.44

	POINTS	MEAN
99. Maintain petty cash records/controlling petty cash payments	57	3.17
100. Preparing payrolls	69	3.83
101. Understanding workmen's compensation laws/determine amounts due	67	3.72
102. Determine unemployment taxes due/understanding effects of "experience ratings"	64	3.56
103. Cash short and over	54	3.00
104. Cost accounting principles	60	3.33
COMPUTER UTILIZATION		
105. Using computers for financial control	67	3.72
106. Basic info processing functions (word processing, data base, spreadsheets, graphics)	62	3.44
107. Using computers for problem solving and planning (using info processing functions)	61	3.39
108. Which business functions to use -- and not use -- the computer for	60	3.33
109. Controls on data entry	55	3.06
110. Hardware and software options	59	3.28
111. Desktop publishing -- principles and software	52	2.89
PURCHASING/MANUFACTURING PROCESSES		
112. Manufacturing/production methods	63	3.50
113. Basic purchasing principles/practices	67	3.72
114. Evaluation of suppliers	65	3.61
115. Determining availability of goods and dealing with lack of availability	66	3.67
116. Determining optimum order quantities for volume purchasing (EOQ and other methods)	67	3.72
117. Using supplier services	70	3.89
118. Systematic buying plans (testing of new products)	60	3.33
119. Purchasing of equipment, fixtures, furnishings	68	3.78
120. Stock control	72	4.00
121. Storage options/warehousing	56	3.11
122. Controlling materials costs	72	4.00

	POINTS	MEAN
LEGAL ENVIRONMENT/GOVERNMENT RELATIONS		
123. Choosing form of ownership (sole proprietorship, partnership, corporation)	76	4.22
124. Tax implications of forms of ownership (double taxation; use of Subchapter "S" status)	69	3.83
125. Know extent of tax liability (business/personal taxes)	72	4.00
126. Understanding recordkeeping requirements (e.g., taxes, payroll)	73	4.06
127. Completing required forms/reports	70	3.89
128. Licensing requirements	70	3.89
129. Understanding laws and statutes (OSHA, ERISA, etc.)	65	3.61
130. Patents and copyrights	52	2.89
131. Contracting with the government	50	2.78
132. "Going public" securities regulations	46	2.56
133. Anti-trust laws and working with competitors	50	2.78
134. Rent/lease agreements	65	3.61
135. Contract law (principles/implications for management policy and business practices)	58	3.22
136. Credit laws (Truth-in-Lending laws; Equal Credit Opportunity Act; etc.)	54	3.00
137. Franchising--advantages/disadvantages/past abuses by franchisors to watch out for	54	3.00
138. Principles/strategies for meeting potential product liability problems	60	3.33
FACILITIES/SECURITY		
139. Determining and planning physical facilities (building and space layout for main facility)	71	3.94
140. Merchandise layout (how to stimulate sales, reduce losses, promote image, etc.)	83	4.61
141. Real estate principles for small firms: lease-buy decisions, tax effects, etc.	63	3.50
142. Location/site selection	82	4.56
143. Principles of risk management and insurance	69	3.83
144. Security issues: employee theft/embezzlement	67	3.72
145. Security issues: shoplifting/robbery	70	3.89
146. Controlling bad check losses	65	3.61
147. Security systems: understanding options/costs/benefits	64	3.56
148. Supply control (controlling amounts used)	63	3.50

	POINTS	MEAN
SMALL BUSINESS AND SOCIETY		
149. Public relations	80	4.46
150. Social responsibility/business ethics	75	4.17
151. Community responsibilities/opportunities	65	3.61
152. Consumerism--trends/principles	67	3.72
153. Problems of minorities/other social concerns	54	3.00
TELECOMMUNICATIONS		
154. Telecommunications principles	58	3.22
155. Telecommunications equipment options (including mobile/cellular, pagers, etc.)	57	3.17
156. Understanding phone service options (call waiting; call forwarding, conferencing, etc.)	58	3.22
157. Integrating telecommunications and information processing (costs/benefits; networking, etc.)	57	3.17
158. Telemarketing	51	2.83
MISCELLANEOUS SMALL BUSINESS MANAGEMENT ISSUES		
159. Factors involved in the sale of an existing business	68	3.78
160. General knowledge of business/industry being entered	75	4.17
161. Office management principles (office layout, records management, etc.)	63	3.50
162. International business principles	47	2.61
163. Import-export opportunities/requirements/problems	48	2.67
164. Effective negotiation techniques	64	3.56
165. Merchandise return policies	55	3.06
166. Preparing reports for employees or upper-level management	50	2.78
167. Safety standards/practices	70	3.89
168. The customer service function -- developing customer relations	82	4.56
169. Business travel options and opportunities (costs/benefits of various options)	48	2.67
170. Business attire -- dressing for success/communicating image	58	3.22

APPENDIX 2**60-ITEM QUESTIONNAIRE (PARTS I AND II)**

APPENDIX 2

60-ITEM QUESTIONNAIRE (PARTS I AND II)

Survey Number _____

SMALL BUSINESS TRAINING QUESTIONNAIRE -- PART I

Thank you for taking the time to complete this questionnaire. Please be assured that your responses will be treated confidentially. In Part II, you will be asked to evaluate the importance (primarily to yourself as an owner/manager and, secondarily, to your employees) of topics which could be included in small business management training programs. First, however, just a few short questions about your background, and management philosophies and practices.

AND NOW, THE QUESTIONS

1. How long have you owned/managed your present firm?
 _____ (a) One year or less _____ (b) More than one year
2. A full-time equivalent employee (FTE) is a person or combination of people who average approximately 35 hours of work per week. Not including the owner(s), how many FTE do you currently employ? (Do not increase the number of FTE because of regular full-time employees who work overtime.)
 _____ (a) None _____ (b) 1-20 _____ (c) 21-99 _____ (d) 100-499 _____ (e) 500+
3. Which statement best describes your educational background? (Please check ONLY ONE!)
- _____ (a) I never completed high school, or my formal education ended with my high school diploma.
 _____ (b) I completed at least one term of college or other post-secondary training but have less than a bachelor's degree.
 _____ (c) I have at least a bachelor's degree.
4. Which of the following best describes you? (Please choose ONLY ONE of the following statements!)
- _____ (a) I am primarily interested in effectively managing what we have now.
 _____ (b) I am primarily interested in the growth and expansion of this business.
5. The current year's sales for this firm will be approximately within which range below? (Circle ONE: "M"=thousand)
 less than \$50M \$50M-\$99M \$100M-\$299M \$300M-\$499M \$500M-\$999M \$1-\$5 Million More
6. I am (circle one) MALE FEMALE 7. This business is a (circle one) PROPRIETORSHIP PARTNERSHIP CORPORATION

(Please circle "Yes" or "No" to questions 8-22)

- Yes No 8. Before owning and managing this firm, I had previously owned and managed another small business.
- Yes No 9. I spend more than 25 hours per week (average) managing/operating this firm.
- Yes No 10. I am a full-time manager of this business.
- Yes No 11. I own 50% or more of this business, or this firm is a partnership in which I have a full and equal interest.
- Yes No 12. This firm provides (or is normally expected to provide) more than half of my contribution to household income.
- Yes No 13. I normally rely (or eventually expect to rely) on this business as an important means of financial support.
- Yes No 14. I have participated in some form of small business management training in the past year. (Small business management training is defined as "formal educational activities provided by colleges, universities, the SBA, Small Business Development Centers, trade associations, or other agencies which have as a goal the improvement of knowledge and skills which facilitate success in the operation of small firms.")
- Yes No 15. I am the original owner/manager of this firm.
- Yes No 16. Since I started (acquired) this firm, new, revenue-producing products and/or services have been introduced.
- Yes No 17. Since I started (acquired) this firm, we have begun to sell our original products/services to new markets.
- Yes No 18. Since I started (acquired) this firm, substantial changes in the way we produce or distribute our goods/services have occurred. (Example: new manufacturing process/substantial automation; expanding warehouse network; new use of catalog/direct mail; distribution through new types of wholesalers and/or retailers)
- Yes No 19. I am planning to expand (or am in the process of expanding) our production capacity by approximately 25%.
- Yes No 20. I am planning to increase our marketing budget by at least (approximately!) 20% per year for the next two years.
- Yes No 21. I anticipate at least an approximately 25% increase in employment over the next two years.
- Yes No 22. I expect this firm's sales to increase AT AN ANNUAL RATE of at least (approximately) 20% per year for the next 3-5 years.

SMALL BUSINESS TRAINING QUESTIONNAIRE -- PART II

Directions: Below are a number of topics that could be part of a training program for managers of new and ongoing small businesses. Indicate your opinion about the importance of each topic by checking the appropriate column to the right of that topic. Use the scale below to indicate your opinion:

- 5 = Very Important
- 4 = Important
- 3 = Of Average Importance
- 2 = Relatively Unimportant
- 1 = Very Unimportant

	POINTS	MEAN
THE SMALL BUSINESS MANAGEMENT ENVIRONMENT		
1. The role and importance of small business in the American economy	111	4.11
2. Basic economic principles (supply and demand, types of competition, etc.)	108	4.00
3. Problems and operating strategies for specific business types (manufacturing/merchandising/service, specific industrial categories (e.g., sporting goods, food service))	114	4.22
4. Establishing new ventures (including licensing requirements)	95	3.52
5. Recordkeeping requirements (for taxes; employment; product liability, licensing, etc.)	123	4.56
6. Public relations (with community; media; government; industry trade groups; etc.)	118	4.37
7. Social responsibility/business ethics	119	4.41
8. Consumerism--trends/principles	105	3.89
9. Safety standards/practices; Occupational Safety & Health Administration requirements	106	3.93
PERSONAL FACTORS IN MANAGING THE SMALL FIRM		
10. Reasons for small business success/failure: skill, capital, and time requirements necessary to operate a small business (and self-assessment of small business management readiness)	121	4.48
11. Personal characteristics of successful entrepreneurs (self-motivation, etc.)	123	4.56
12. Self-image building for small business owners	112	4.15
13. Coping with change, ill-defined situations, uncertainty, and ambiguity	106	3.93
14. Building the entrepreneurial team (integrating the efforts of owners, investors/venture capitalists, creditors, suppliers, business advisors (accountants, lawyers, bankers))	103	3.81
15. Communications skills (interpret policies to workers, encouraging employee input, etc.)	113	4.19
16. Problem solving/decision making techniques	119	4.41
17. Unique aspects of family firms--time demands/relationships/etc.	108	4.00

	POINTS	MEAN
PLANNING FOR AND CONTROLLING RESOURCES		
18. Preparing business plans for new ventures (and presentation to sources of financing)	103	3.81
19. Goal setting: Principles of long-range planning and forecasting/trend analysis; budgeting	110	4.07
20. Principles of management (planning, organizing, directing, delegating, controlling)	103	3.81
21. Periodic reviews of the organization (how and how often to conduct; internal auditing)	106	3.93
22. Developing marketing plans/strategies; identifying/assessing target markets; forecasting sales	110	4.07
23. Advertising campaigns for the small firm: planning/scheduling/budgeting/evaluating	105	3.89
24. Cash management: Figuring working capital requirements	118	4.37
25. Cash management: cash flow principles; cash budgeting/forecasting	120	4.44
26. Calculating and understanding the use of financial ratios: (Profitability ratios (return on investment, return on sales, etc.); Liquidity ratios (quick ratio, current ratio, receivables turnover, etc.); Borrowing capacity ratios (debt to equity ratio, etc.))	105	3.89
27. Using computers to assess financial trends (ratio trends; revenue and expense trends, etc.)	94	3.48
28. Inventory control principles (including merchandise inventory turnover calculations)	112	4.15
29. Principles of risk management and insurance	100	3.70
30. Security issues: employee theft/embezzlement/shoplifting/robbery	107	3.96
ACQUIRING/ORGANIZING RESOURCES		
31. Finding and evaluating potential business opportunities (new and existing businesses)	101	3.74
32. Methods of acquiring capital (debt vs. equity, advant./disadvant. of venture capitalists, etc.)	96	3.56
33. Preparing loan packages and applications	95	3.52
34. Understanding banking requirements and benefits; negotiating terms with bankers/other lenders	96	3.56
35. Determining optimum order quantities for volume purchasing (EOQ and other methods)	93	3.44
36. Merchandise/materials/supplies inventories: cost containment	102	3.78
37. Negotiating for and using supplier services	102	3.78
38. Purchasing of fixed assets: buildings, equipment, fixtures, furnishings, vehicles, etc.	99	3.67
39. Choosing form of ownership (tax and other impacts of proprietorship, partnership, corporation)	106	3.93
40. Hiring practices/requirements (including knowledge of anti-discrimination laws)	104	3.85
41. Factors involved in the sale of an existing business	101	3.74

	POINTS	MEAN
DEPLOYING RESOURCES		
42. Techniques for reaching goals; formulating strategy and developing policy	101	3.74
43. Motivating employees	117	4.33
44. Scheduling of work	100	3.70
45. Training and development for employees (options available; costs/benefits)	106	3.93
46. Evaluation of employees	106	3.93
47. Team building skills (promoting teamwork on the part of employees)	109	4.04
48. General advertising principles (media options/costs; types of appeals; content/layout etc.)	97	3.59
49. Personal selling techniques: prospecting; types of sales appeals; closing strategies; etc.	114	4.22
50. Pricing: approaches to price determination; establishing pricing policies; integration with inventory control systems; calculating prices (markups, markdowns, etc.)	111	4.11
51. Allocating capital (determining optimum capital allocation among projects)	99	3.67
52. Designing, establishing, and maintaining the bookkeeping/accounting system	118	4.37
53. Understanding/interpreting financial statements (understanding what information is available from each major statement; scope of decisions that can be made based on these data)	108	4.00
54. Payrolls: Wage and salary administration (determination of optimal wage/salary levels; fairness in wage/salary structure for the firm; motivational impacts of wage, salary, and benefit payments)	111	4.11
55. Payrolls: preparation; tax laws/employee benefit requirements (e.g., workmen's compensation)	106	3.93
56. Basic purchasing principles/practices	108	4.00
57. Completing required forms/reports	98	3.63
58. Determining and planning physical facilities (location/site selection, facility layout)	104	3.85
59. Merchandise layout (how to stimulate sales, reduce losses, promote image, etc.)	112	4.15
60. The customer service function -- developing customer relations	127	4.70

IF THE SELF-ADDRESSED RETURN ENVELOPE IS LOST, PLEASE
RETURN YOUR COMPLETED SURVEY TO:

Bruce E. Herbert
P. O. Box D
Florence, OR 97439

APPENDIX 3**40-ITEM FINAL QUESTIONNAIRE**

APPENDIX 3 40-ITEM FINAL QUESTIONNAIRE

Survey Number _____

SMALL BUSINESS TRAINING QUESTIONNAIRE -- PART I

Thank you for taking the time to complete this questionnaire. Please be assured that your responses will be treated confidentially. This study concerns information about small business in general, not individual firms. In Part II, you will be asked to evaluate the importance (primarily to yourself as an owner/manager and, secondarily, to your employees) of topics which could be included in small business management training programs. First, however, just a few short questions about your background, and management philosophies and practices. These questions will help us correctly classify your firm into one of four entrepreneurial categories.

AND NOW, THE QUESTIONS

1. How long have you owned/managed your present firm?
 _____ (a) One year or less _____ (b) More than one year

2. A full-time equivalent employee (FTE) is a person or combination of people who average approximately 35 hours of work per week. Not including the owner(s), how many FTE do you currently employ? (Do not increase the number of FTE because of regular full-time employees who work overtime.)
 _____ (a) None _____ (b) 1-20 _____ (c) 21-99 _____ (d) 100-499 _____ (e) 500+

3. Which statement best describes your educational background? (Please check ONLY one!)
 _____ (a) I never completed high school, or my formal education ended with my high school diploma.
 _____ (b) I completed at least one term of college or other post-secondary training but have less than a bachelor's degree.
 _____ (c) I have a bachelor's degree, but do not have a graduate degree.
 _____ (d) I have a graduate degree.

4. Which of the following best describes you? (Please choose ONLY ONE of the following statements!)
 _____ (a) I am primarily interested in effectively managing what we have now.
 _____ (b) I am primarily interested in the growth and expansion of this business.

5. The current year's sales for this firm will be approximately within which range below? (Circle ONE; "M"=thousand)
 less than \$50M \$50M-\$99M \$100M-\$299M \$300M-\$499M \$500M-\$999M \$1-45 Million More

6. I am (circle one): MALE FEMALE

7. This business is a (circle one):
 PROPRIETORSHIP PARTNERSHIP CORPORATION OTHER

(Please circle "Yes" or "No" to questions 8-22)

- Yes No 8. Before owning and managing this firm, I had previously owned and managed another small business.
- Yes No 9. I spend more than 25 hours per week (average) managing/operating this firm.
- Yes No 10. I am a full-time manager of this business.

PLEASE CONTINUE ----->

- Yes No 11. I own 50% or more of this business, or this firm is a partnership with more than two partners in which I have a full and equal interest (I am one of three partners who each have a 1/3 interest; one of four partners who each have a 1/4 interest; etc.).
- Yes No 12. This firm provides (or is normally expected to provide) more than half of my contribution to household income.
- Yes No 13. I normally rely (or eventually expect to rely) on this business as an important means of financial support.
- Yes No 14. I have participated in some form of small business management training in the past year. (Small business management training is defined as "formal educational activities provided by colleges, universities, the SBA, Small Business Development Centers, trade associations, or other agencies which have as a goal the improvement of knowledge and skills which facilitate success in the operation of small firms.")
- Yes No 15. I am the original owner/manager of this firm.
- Yes No 16. Since I started (acquired) this firm, new, revenue-producing products and/or services have been introduced.
- Yes No 17. Since I started (acquired) this firm, we have begun to sell our original products/services to new markets (new types, or categories, of customers).
- Yes No 18. Since I started (acquired) this firm, substantial changes in the way we produce or distribute our goods/services have occurred. (Example: new manufacturing process/substantial automation; expanding warehouse network; new use of catalog/direct mail; distribution through new types of wholesalers and/or retailers)
- Yes No 19. I am planning to expand (or am in the process of expanding) our production capacity by approximately 25%.
- Yes No 20. I am planning to increase our marketing budget by at least (approximately!) 20% per year for the next two years.
- Yes No 21. I anticipate at least an approximately 25% increase in employment over the next two years.
- Yes No 22. I expect this firm's sales to increase AT AN ANNUAL RATE of at least (approximately) 20% per year for the next 3-5 years.

SMALL BUSINESS TRAINING QUESTIONNAIRE -- PART II

Directions: Below are a number of topics that could be part of a training program for managers of new and ongoing small businesses. Indicate your opinion about the importance of each topic by checking the appropriate column to the right of that topic. PLEASE RATE EACH OF THE 40 ITEMS!! (If a topic does not seem to apply to you, you may consider it to be unimportant.) Use the scale below to indicate your opinion:

- 5 = Very Important
 4 = Important
 3 = Of Average Importance
 2 = Relatively Unimportant
 1 = Very Unimportant

1. Motivating employees
2. Recordkeeping requirements (for taxes; employment; product liability, licensing, etc.)
3. Merchandise layout (how to stimulate sales, reduce losses, promote image, etc.)

5	4	3	2	1

PLEASE CONTINUE ----->

	5	4	3	2	1
4. Social responsibility/business ethics					
5. Developing marketing plans/strategies; identifying/assessing target markets; forecasting sales					
6. Basic economic principles (supply and demand, types of competition, etc.)					
7. Evaluation of employees					
8. Understanding/interpreting financial statements (understanding what information is available from each major statement; scope of decisions that can be made based on these data)					
9. Problem solving/decision making techniques					
10. Cash management: cash flow principles; cash budgeting/forecasting					
11. Problems and operating strategies for specific business types (manufacturing/merchandising/service, specific industrial categories (e.g., sporting goods, food service))					
12. The customer service function -- developing customer relations					
13. Reasons for small business success/failure: skill, capital, and time requirements necessary to operate a small business (and self-assessment of small business management readiness)					
14. Self-image building for small business owner					
15. Cash management: Figuring working capital requirements					
16. Public relations (with community; media; government; industry trade groups; etc.)					
17. Coping with change, ill-defined situations, uncertainty, and ambiguity					
18. Consumerism--trends/principles					
19. Unique aspects of family firms--time demands/relationships/etc.					
20. Security issues: employee theft/embezzlement/shoplifting/robbery					
21. The role and importance of small business in the American economy					
22. Basic purchasing principles/practices					
23. Goal setting: Principles of long-range planning and forecasting/trend analysis; budgeting					
24. Personal characteristics of successful entrepreneurs (self-motivation, etc.)					

PLEASE CONTINUE (ONE MORE
TIME, WITH FEELING!) -----)

	5	4	3	2	1
25. Pricing: approaches to price determination; establishing pricing policies; integration with inventory control systems; calculating prices (markups, markdowns, etc.)					
26. Periodic reviews of the organization (how and how often to conduct; internal auditing)					
27. Advertising campaigns for the small firm: planning/scheduling/budgeting/evaluating					
28. Personal selling techniques: prospecting; types of sales appeals; closing strategies; etc.					
29. Payrolls: Wage and salary administration (determination of optimal wage/salary levels; fairness in wage/salary structure for the firm; motivational impacts of wage, salary, and benefit payments)					
30. Payrolls: preparation; tax laws/employee benefit requirements (e.g., workmen's compensation)					
31. Hiring practices/requirements (including knowledge of anti-discrimination laws)					
32. Communications skills (interpret policies to workers, encouraging employee input, etc.)					
33. Designing, establishing, and maintaining the bookkeeping/accounting system					
34. Team building skills (promoting teamwork on the part of employees)					
35. Calculating and understanding the use of financial ratios: (Profitability ratios (return on investment, return on sales, etc.); Liquidity ratios (quick ratio, current ratio, receivables turnover, etc.); Borrowing capacity ratios (debt to equity ratio, etc.))					
36. Inventory control principles (including merchandise inventory turnover calculations)					
37. Determining and planning physical facilities (location/site selection, facility layout)					
38. Choosing form of ownership (tax and other impacts of proprietorship, partnership, corporation)					
39. Training and development for employees (options available; costs/benefits)					
40. Safety standards/practices; Occupational Safety & Health Administration requirements					

IF THE SELF-ADDRESSED RETURN ENVELOPE IS LOST,
PLEASE RETURN YOUR COMPLETED SURVEY TO:

Bruce E. Herbert
P. O. Box D
Florence, OR 97439

APPENDIX 4

COVER LETTER AND ENVELOPE -- INITIAL MAILING

APPENDIX 4
COVER LETTER AND ENVELOPE -- INITIAL MAILING

COLLEGE OF EDUCATION



OREGON
STATE
UNIVERSITY

Education Hall
Corvallis, Oregon 97331-3502

Telephone
503-737-4661

Fax
503-737-2040

February 3, 1992

Dear Entrepreneur:

Your thoughts are most valuable to us!

In a fast-paced business environment, constant updating of knowledge and skills is essential. As a manager, you realize the value of effective training. By completing the enclosed questionnaire, you can help improve the efficiency of training offered to those managing smaller firms--the businesses responsible for such a large part of America's economic growth.

More precise targeting of training means greater value for each training dollar. The purpose of this project is to assess differences in training needs among entrepreneurs. Project results will enable us to better address the educational concerns of small business managers. Since the survey is being sent to a random sample of firms around Oregon, your opinions will carry additional weight; each respondent will, in effect, be representing hundreds of managers. As you can see, YOUR OPINION COUNTS! Your privacy is protected; complete confidentiality will be maintained.

The survey is short; it takes only a few minutes to complete. All questions are answered with circles or check marks. Some questions refer to income, growth percentages, and other financial information. Researching your records is NOT NECESSARY. Your general perceptions will do just fine! If you have any comments about the clarity of questions or concepts, feel free to write comments on the questionnaire.

A stamped, self-addressed envelope has been provided for your convenience. Prompt completion and mailing of the survey will be very much appreciated.

We look forward to hearing from you!

Redacted for privacy

Bruce E. Herbert
Bruce E. Herbert
Project Director

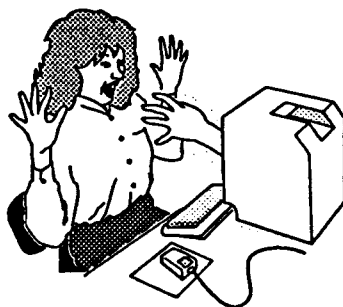
Enclosures (2)
Questionnaire
Envelope

Bruce E. Herbert, Project Director
COLLEGE OF EDUCATION



OREGON STATE UNIVERSITY
Education Hall 210 • Corvallis, Oregon 97331-3502

YOUR PROMPT ATTENTION REQUESTED!



APPENDIX 5**COVER LETTER AND ENVELOPE -- FOLLOW-UP MAILING**

APPENDIX 5

COVER LETTER AND ENVELOPE -- FOLLOW-UP MAILING

COLLEGE OF EDUCATION



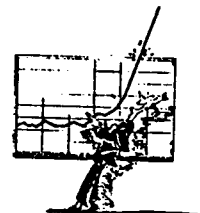
OREGON
STATE
UNIVERSITY

Education Hall
Corvallis, Oregon 97331-3502

Telephone
503-737-4661

Fax
503-737-2040

March 4, 1992



Dear Entrepreneur:

We'd like to hear from an independent business expert. YOU!

In order to better prepare those originating and/or managing Oregon's smaller firms, we need information. About entrepreneurs. Their philosophies. And their firms. The purpose of the Entrepreneurship Training Research Project is to provide data that will help trainers develop programs of maximum value to independent business owners and managers. Such programs can help businesses increase profits and reduce management headaches.

So far, the response to this survey has greatly exceeded expectations. However, our goal is not to hear from many--or even most--of those surveyed. We want to hear from YOU. By sharing your knowledge, experience, and opinions, you will help us improve the quality of entrepreneurship training--thus enhancing the prospects for many small firms. Some day, one of those firms may even be yours!

All responses will be completely anonymous. (As you can see, there is not even a survey number on the questionnaire; numbers were used on the original survey only for follow-up purposes, to avoid sending duplicate questionnaires to those who have already responded.)

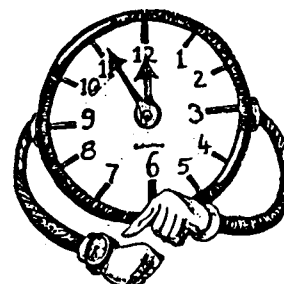
No essay answers are required; all questions can be answered with check marks or circles. (Though any comments you wish to make will certainly be read with great interest!) Researching your records for financial information is NOT necessary; your general perceptions are more important than specific data.

A self-addressed return envelope has again been included for your convenience. So, won't you please take a few minutes to respond? Your prompt reply IS important and will be very much appreciated.

Redacted for privacy

b
Bruce E. Herbert,
Project Director

Enclosures (2)
Questionnaire
Return envelope





Bruce E. Herbert, Project Director
Entrepreneurship Training Research Project

COLLEGE OF EDUCATION

OREGON STATE UNIVERSITY

Education Hall 210 • Corvallis, Oregon 97331-3502

WE KNOW YOU'RE BUSY . . .
BUT WE STILL WANT TO HEAR FROM YOU!



APPENDIX 6**RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE (HYPOTHESES 1-4)**

APPENDIX 6
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE (HYPOTHESES 1-4)

TABLE A.1
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE --
DEVELOPER ENTREPRENEURS

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
1	12	The customer service function	91	4.538	.080
2	1	Motivating employees	90	4.500	.096
3	2	Recordkeeping requirements	90	4.473	.119
4	10	Cash management.: cash flow princ.; budget/forecast.	90	4.311	.092
5	9	Problem solving/decision making techniques	90	4.278	.089
6	5	Devel. mktg. plans/strat.	91	4.275	.094
7	4	Social resp./bus. ethics	91	4.209	.091
8	15	Cash management: working capital requirements	91	4.209	.096
9	23	Goal setting: planning/ forecasting/budgeting	91	4.143	.099
10	32	Communications skills	91	4.110	.106
11	28	Personal selling techniques	91	4.022	.115
12	25	Pricing	91	4.011	.107
13	34	Team building skills	89	4.011	.109
14	39	Employee training/development	90	3.600	.121
15	8	Understanding/interpreting financial statements	91	3.978	.099
16	13	Reasons for SBM succ./fail.	90	3.978	.114
17	16	Public relations	91	3.956	.104
18	3	Merchandise layout	90	3.900	.121
19	24	Personal char. of succ. ent.	89	3.865	.116

(Table A.1, continued)

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
20	11	Problems/operating strategies for specific business types	88	3.852	.109
21	33	Designing/maintaining the accounting system	91	3.846	.109
22	31	Hiring practices/requirements	89	3.843	.114
23	14	Self-image building	91	3.835	.119
24	17	Coping with change/uncert.	90	3.833	.101
25	6	Basic economic principles	91	3.791	.102
26	27	Advertising campaigns	89	3.753	.108
27	7	Evaluation of employees	89	3.742	.109
28	30	Payrolls: preparation/tax and benefit laws	90	3.700	.120
29	29	Payrolls: Wage/salary admin.	90	3.633	.110
30	40	Safety standards/practices	90	3.600	.121
31	19	Unique aspects of family firms	90	3.578	.128
32	35	Calculating/understanding financial ratios	91	3.560	.120
33	26	Periodic org. reviews	91	3.495	.098
34	18	Consumerism--trends/principles	91	3.495	.105
35	22	Basic purchasing prin./prac.	91	3.495	.116
36	38	Choosing form of ownership	91	3.451	.126
37	21	Role/importance of small bus.	91	3.407	.134
38	36	Inventory control principles	91	3.352	.124
39	20	Security issues	91	3.253	.125
40	37	Determ./planning physical fac.	91	3.231	.121

TABLE A.2
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE --
BUILDER ENTREPRENEURS

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
1	10	Cash mgmt.: cash flow princ.; budget/forecast.	47	4.553	.092
2	12	The customer service function	47	4.489	.111
3	2	Recordkeeping requirements	47	4.383	.119
4	1	Motivating employees	45	4.378	.136
5	15	Cash management: working capital requirements	46	4.370	.136
6	5	Devel. mktg. plans/strat.	46	4.304	.133
7	4	Social resp./bus. ethics	45	4.178	.129
8	9	Problem solving/decision making techniques	46	4.174	.125
9	8	Understanding/interpreting financial statements	47	4.128	.137
10	23	Goal setting: planning/ forecasting/budgeting	47	4.106	.137
11	16	Public relations	47	4.106	.144
12	3	Merchandise layout	47	4.085	.167
13	13	Reasons for SBM succ./fail.	47	4.064	.157
14	33	Designing/maintaining the accounting system	47	4.021	.152
15	34	Team building skills	47	4.000	.150
16	28	Personal selling techniques	47	3.936	.159
17	32	Communications skills	47	3.915	.147
18	6	Basic economic principles	47	3.894	.142
19	25	Pricing	47	3.872	.149

(Table A.2, continued)

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
20	7	Evaluation of employees	47	3.872	.150
21	24	Personal char. of succ. ent.	47	3.872	.159
22	11	Problems/operating strategies for specific business types	47	3.851	.149
23	31	Hiring practices/requirements	47	3.830	.157
24	14	Self-image building	47	3.809	.166
25	40	Safety standards/practices	47	3.809	.168
26	17	Coping with change/uncert.	47	3.787	.140
27	38	Choosing form of ownership	47	3.787	.175
28	26	Periodic org. reviews	47	3.766	.136
29	39	Employee training/development	47	3.766	.154
30	29	Payrolls: Wage/salary admin.	47	3.723	.153
31	30	Payrolls: preparation/tax and benefit laws	47	3.723	.166
32	18	Consumerism--trends/principles	47	3.660	.146
33	19	Unique aspects of family firms	47	3.638	.177
34	36	Inventory control principles	47	3.617	.172
35	21	Role/importance of small bus.	47	3.617	.186
36	27	Advertising campaigns	47	3.596	.149
37	35	Calculating/understanding financial ratios	47	3.596	.167
38	22	Basic purchasing prin./prac.	47	3.511	.161
39	37	Determ./planning physical fac.	47	3.489	.168
40	20	Security issues	47	3.489	.173

TABLE A.3
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE --
INITIATOR ENTREPRENEURS

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
1	12	The customer service function	214	4.491	.052
2	1	Motivating employees	212	4.434	.062
3	2	Recordkeeping requirements	216	4.394	.056
4	4	Social resp./bus. ethics	213	4.362	.059
5	10	Cash mgmt.: cash flow princ.; budget/forecast.	214	4.164	.060
6	9	Problem solving/decision making techniques	214	4.121	.058
7	15	Cash management: working capital requirements	214	4.079	.063
8	13	Reasons for SBM succ./fail.	211	4.014	.074
9	32	Communications skills	214	4.000	.069
10	3	Merchandise layout	215	3.963	.078
11	34	Team building skills	215	3.958	.070
12	24	Personal char. of succ. ent.	214	3.921	.075
13	23	Goal setting: planning/ forecasting/budgeting	213	3.920	.064
14	25	Pricing	216	3.907	.069
15	5	Devel. mktg. plans/strat.	214	3.883	.062
16	33	Designing/maintaining the accounting system	216	3.856	.071
17	8	Understanding/interpreting financial statements	214	3.855	.064
18	16	Public relations	212	3.849	.068
19	14	Self-image building	213	3.826	.078

(Table A.3, continued)

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
20	7	Evaluation of employees	214	3.813	.070
21	6	Basic economic principles	213	3.779	.067
22	17	Coping with change/uncert.	214	3.762	.066
23	28	Personal selling techniques	215	3.698	.075
24	39	Employee training/development	215	3.656	.072
25	11	Problems/operating strategies for specific business types	212	3.623	.070
26	40	Safety standards/practices	215	3.600	.078
27	29	Payrolls: Wage/salary admin.	215	3.581	.071
28	30	Payrolls: preparation/tax and benefit laws	213	3.549	.078
29	31	Hiring practices/requirements	215	3.535	.073
30	19	Unique aspects of family firms	211	3.526	.083
31	27	Advertising campaigns	216	3.500	.069
32	22	Basic purchasing prin./prac.	214	3.500	.075
33	26	Periodic org. reviews	215	3.474	.064
34	35	Calculating/understanding financial ratios	215	3.433	.078
35	18	Consumerism--trends/principles	213	3.432	.069
36	21	Role/importance of small bus.	213	3.432	.087
37	36	Inventory control principles	215	3.391	.080
38	38	Choosing form of ownership	215	3.391	.082
39	37	Determ./planning physical fac.	212	3.311	.079
40	20	Security issues	213	3.272	.081

TABLE A.4
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE --
MAINTAINER ENTREPRENEURS

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
1	1	Motivating employees	249	4.578	.058
2	12	The customer service function	256	4.527	.048
3	2	Recordkeeping requirements	257	4.292	.051
4	10	Cash mgmt.: cash flow princ.; budget/forecast.	256	4.234	.055
5	4	Social resp./bus. ethics	255	4.227	.054
6	9	Problem solving/decision making techniques	257	4.128	.058
7	3	Merchandise layout	256	4.055	.072
8	5	Devel. mktg. plans/strat.	256	4.051	.056
9	15	Cash management: working capital requirements	256	4.043	.057
10	34	Team building skills	255	4.008	.064
11	32	Communications skills	254	3.996	.063
12	8	Understanding/interpreting financial statements	256	3.984	.059
13	23	Goal setting: planning/ forecasting/budgeting	256	3.926	.059
14	25	Pricing	256	3.906	.064
15	7	Evaluation of employees	253	3.881	.065
16	16	Public relations	256	3.855	.062
17	13	Reasons for SBM succ./fail.	253	3.834	.068
18	40	Safety standards/practices	255	3.749	.072
19	17	Coping with change/uncert.	256	3.727	.060
20	39	Employee training/development	256	3.723	.066

(Table A.4, continued)

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
21	6	Basic economic principles	255	3.702	.061
22	33	Designing/maintaining the accounting system	255	3.698	.065
23	24	Personal char. of succ. ent.	256	3.691	.068
24	29	Payrolls: Wage/salary admin.	257	3.669	.065
25	14	Self-image building	256	3.668	.071
26	31	Hiring practices/requirements	255	3.663	.067
27	28	Personal selling techniques	256	3.645	.068
28	30	Payrolls: preparation/tax and benefit laws	256	3.570	.071
29	11	Problems/operating strategies for specific business types	248	3.548	.065
30	36	Inventory control principles	256	3.523	.074
31	35	Calculating/understanding financial ratios	256	3.492	.072
32	26	Periodic org. reviews	257	3.463	.058
33	27	Advertising campaigns	256	3.445	.064
34	22	Basic purchasing prin./prac.	257	3.455	.069
35	18	Consumerism--trends/principles	256	3.426	.063
36	37	Determ./planning physical fac.	256	3.320	.072
37	20	Security issues	256	3.258	.074
38	21	Role/importance of small bus.	256	3.234	.080
39	38	Choosing form of ownership	255	3.180	.075
40	19	Unique aspects of family firms	252	3.131	.076

TABLE A.5
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE --
STARTER ENTREPRENEURS

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
1	12	The customer service function	305	4.505	.044
2	1	Motivating employees	302	4.454	.052
3	2	Recordkeeping requirements	307	4.417	.047
4	4	Social resp./bus. ethics	304	4.316	.050
5	10	Cash mgmt.: cash flow princ.; budget/forecast.	304	4.207	.050
6	9	Problem solving/decision making techniques	304	4.168	.049
7	15	Cash management: working capital requirements	305	4.118	.053
8	32	Communications skills	305	4.033	.058
9	13	Reasons for SBM succ./fail.	301	4.003	.062
10	5	Devel. mktg. plans/strat.	305	4.000	.052
11	23	Goal setting: planning/ forecasting/budgeting	304	3.987	.054
12	34	Team building skills	304	3.974	.059
13	3	Merchandise layout	305	3.944	.065
14	25	Pricing	307	3.938	.058
15	24	Personal char. of succ. ent.	303	3.904	.063
16	8	Understanding/interpreting financial statements	305	3.892	.054
17	16	Public relations	303	3.881	.057
18	33	Designing/maintaining the accounting system	307	3.853	.059
19	14	Self-image building	304	3.829	.065

(Table A.5, continued)

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
20	28	Personal selling techniques	306	3.794	.063
21	7	Evaluation of employees	303	3.792	.059
22	17	Coping with change/uncert.	304	3.783	.055
23	6	Basic economic principles	304	3.783	.056
24	39	Employee training/development	305	3.754	.061
25	11	Problems/operating strategies for specific business types	300	3.690	.059
26	31	Hiring practices/requirements	304	3.625	.062
27	40	Safety standards/practices	305	3.600	.066
28	29	Payrolls: Wage/salary admin.	305	3.597	.060
29	30	Payrolls: preparation/tax and benefit laws	303	3.594	.066
30	27	Advertising campaigns	305	3.574	.058
31	19	Unique aspects of family firms	301	3.542	.070
32	22	Basic purchasing prin./prac.	305	3.498	.063
33	26	Periodic org. reviews	306	3.480	.053
34	35	Calculating/understanding financial ratios	306	3.471	.065
35	18	Consumerism--trends/principles	304	3.451	.058
36	21	Role/importance of small bus.	304	3.424	.073
37	38	Choosing form of ownership	306	3.408	.069
38	36	Inventory control principles	306	3.379	.067
39	37	Determ./planning physical fac.	303	3.287	.066
40	20	Security issues	304	3.266	.068

TABLE A.6
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE --
ACQUIRER ENTREPRENEURS

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
1	1	Motivating employees	294	4.548	.053
2	12	The customer service function	303	4.521	.044
3	2	Recordkeeping requirements	304	4.306	.047
4	10	Cash mgmt.: cash flow princ.; budget/forecast.	303	4.284	.051
5	4	Social resp./bus. ethics	300	4.220	.050
6	9	Problem solving/decision making techniques	303	4.135	.049
7	15	Cash management: working capital requirements	302	4.093	.053
8	5	Devel. mktg. plans/strat.	302	4.089	.052
9	3	Merchandise layout	303	4.059	.066
10	8	Understanding/interpreting financial statements	303	4.007	.054
11	34	Team building skills	302	4.007	.059
12	32	Communications skills	301	3.983	.058
13	23	Goal setting: planning/ forecasting/budgeting	303	3.954	.054
14	25	Pricing	303	3.901	.059
15	16	Public relations	303	3.894	.057
16	7	Evaluation of employees	300	3.880	.059
17	13	Reasons for SBM succ./fail.	300	3.870	.062
18	40	Safety standards/practices	302	3.758	.066
19	33	Designing/maintaining the accounting system	302	3.748	.060

(Table A.6, continued)

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
20	17	Coping with change/uncert.	303	3.736	.055
21	6	Basic economic principles	302	3.732	.056
22	39	Employee training/development	303	3.729	.061
23	24	Personal char. of succ. ent.	303	3.719	.063
24	28	Personal selling techniques	303	3.690	.063
25	14	Self-image building	303	3.690	.065
26	31	Hiring practices/requirements	302	3.689	.062
27	29	Payrolls: Wage/salary admin.	304	3.678	.060
28	11	Problems/operating strategies for specific business types	295	3.597	.060
29	30	Payrolls: preparation/tax and benefit laws	303	3.594	.066
30	36	Inventory control principles	303	3.538	.068
31	26	Periodic org. reviews	304	3.510	.054
32	35	Calculating/understanding financial ratios	303	3.508	.066
33	27	Advertising campaigns	303	3.469	.059
34	22	Basic purchasing prin./prac.	304	3.464	.063
35	18	Consumerism--trends/principles	303	3.462	.058
36	37	Determ./planning physical fac.	303	3.347	.066
37	20	Security issues	304	3.294	.068
38	21	Role/importance of small bus.	303	3.294	.073
39	38	Choosing form of ownership	302	3.275	.070
40	19	Unique aspects of family firms	299	3.211	.070

TABLE A.7
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE --
GROWTH-ORIENTED ENTREPRENEURS

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
1	12	The customer service function	138	4.522	.065
2	1	Motivating employees	135	4.459	.078
3	2	Recordkeeping requirements	138	4.442	.069
4	10	Cash mgmt.: cash flow princ.; budget/forecast.	137	4.394	.075
5	5	Devel. mktg. plans/strat.	137	4.285	.077
6	15	Cash management: working capital requirements	137	4.263	.079
7	9	Problem solving/decision making techniques	136	4.243	.073
8	4	Social resp./bus. ethics	136	4.199	.074
9	23	Goal setting: planning/ forecasting/budgeting	138	4.130	.080
10	32	Communications skills	138	4.043	.086
11	8	Understanding/interpreting financial statements	138	4.029	.080
12	16	Public relations	138	4.007	.084
13	34	Team building skills	136	4.007	.088
14	13	Reasons for SBM succ./fail.	137	4.007	.092
15	28	Personal selling techniques	138	3.993	.093
16	25	Pricing	138	3.964	.087
17	3	Merchandise layout	137	3.964	.098
18	39	Employee training/development	137	3.912	.090
19	33	Designing/maintaining the accounting system	138	3.906	.089

(Table A.7, continued)

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
20	24	Personal char. of succ. ent.	136	3.868	.094
21	11	Problems/operating strategies for specific business types	135	3.852	.088
22	31	Hiring practices/requirements	136	3.838	.092
23	6	Basic economic principles	138	3.826	.083
24	14	Self-image building	138	3.826	.097
25	17	Coping with change/uncert.	137	3.818	.082
26	7	Evaluation of employees	136	3.787	.088
27	30	Payrolls: preparation/tax and benefit laws	137	3.708	.097
28	27	Advertising campaigns	136	3.699	.087
29	40	Safety standards/practices	137	3.672	.098
30	29	Payrolls: Wage/salary admin.	137	3.664	.089
31	19	Unique aspects of family firms	137	3.599	.104
32	26	Periodic org. reviews	138	3.587	.079
33	35	Calculating/understanding financial ratios	138	3.572	.097
34	38	Choosing form of ownership	138	3.565	.102
35	18	Consumerism--trends/principles	138	3.551	.085
36	22	Basic purchasing prin./prac.	138	3.500	.094
37	21	Role/importance of small bus.	138	3.478	.109
38	36	Inventory control principles	138	3.442	.100
39	20	Security issues	138	3.333	.101
40	37	Determ./planning physical fac.	138	3.319	.098

TABLE A.8
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE --
NON-GROWTH-ORIENTED ENTREPRENEURS

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
1	1	Motivating employees	461	4.512	.042
2	12	The customer service function	470	4.511	.035
3	2	Recordkeeping requirements	473	4.338	.038
4	4	Social resp./bus. ethics	468	4.288	.040
5	10	Cash mgmt.: cash flow princ.; budget/forecast.	470	4.202	.040
6	9	Problem solving/decision making techniques	471	4.125	.039
7	15	Cash management: working capital requirements	470	4.060	.042
8	3	Merchandise layout	471	4.013	.053
9	32	Communications skills	468	3.998	.047
10	34	Team building skills	470	3.985	.047
11	5	Devel. mktg. plans/strat.	470	3.974	.042
12	8	Understanding/interpreting financial statements	470	3.926	.043
13	23	Goal setting: planning/ forecasting/budgeting	469	3.923	.043
14	13	Reasons for SBM succ./fail.	464	3.916	.050
15	25	Pricing	472	3.907	.047
16	16	Public relations	468	3.853	.046
17	7	Evaluation of employees	467	3.850	.048
18	24	Personal char. of succ. ent.	470	3.796	.050
19	33	Designing/maintaining the accounting system	471	3.771	.048

(Table A.8, continued)

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
20	17	Coping with change/uncert.	470	3.743	.044
21	14	Self-image building	469	3.740	.053
22	6	Basic economic principles	468	3.737	.045
23	39	Employee training/development	471	3.692	.049
24	40	Safety standards/practices	470	3.681	.053
25	28	Personal selling techniques	471	3.669	.050
26	29	Payrolls: Wage/salary admin.	472	3.629	.048
27	31	Hiring practices/requirements	470	3.604	.050
28	11	Problems/operating strategies for specific business types	460	3.583	.047
29	30	Payrolls: preparation/tax and benefit laws	469	3.561	.053
30	22	Basic purchasing prin./prac.	471	3.476	.051
31	27	Advertising campaigns	472	3.470	.047
32	26	Periodic org. reviews	472	3.468	.043
33	35	Calculating/understanding financial ratios	471	3.465	.053
34	36	Inventory control principles	471	3.463	.054
35	18	Consumerism--trends/principles	469	3.429	.046
36	21	Role/importance of small bus.	469	3.324	.059
37	37	Determ./planning physical fac.	468	3.316	.053
38	19	Unique aspects of family firms	463	3.311	.057
39	38	Choosing form of ownership	470	3.277	.056
40	20	Security issues	469	3.264	.055

TABLE A.9
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE --
ENTREPRENEURS WITH CURRENT FIRM ONE YEAR OR LESS

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
1	1	Motivating employees	38	4.500	.148
2	2	Recordkeeping requirements	38	4.447	.133
3	12	The customer service function	38	4.421	.124
4	10	Cash mgmt.: cash flow princ.; budget/forecast.	38	4.421	.143
5	3	Merchandise layout	38	4.289	.185
6	9	Problem solving/decision making techniques	38	4.263	.137
7	5	Devel. mktg. plans/strat.	38	4.263	.147
8	4	Social resp./bus. ethics	38	4.237	.141
9	15	Cash management: working capital requirements	38	4.079	.150
10	8	Understanding/interpreting financial statements	38	4.053	.153
11	16	Public relations	38	4.000	.160
12	6	Basic economic principles	37	3.973	.160
13	32	Communications skills	38	3.921	.163
14	23	Goal setting: planning/ forecasting/budgeting	38	3.895	.153
15	33	Designing/maintaining the accounting system	38	3.868	.169
16	28	Personal selling techniques	38	3.868	.178
17	11	Problems/operating strategies for specific business types	38	3.816	.166
18	13	Reasons for SBM succ./fail.	38	3.816	.175

(Table A.9, continued)

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
19	34	Team building skills	38	3.789	.167
20	31	Hiring practices/requirements	38	3.763	.175
21	7	Evaluation of employees	38	3.711	.167
22	17	Coping with change/uncert.	38	3.684	.156
23	30	Payrolls: preparation/tax and benefit laws	38	3.684	.185
24	29	Payrolls: Wage/salary admin.	38	3.658	.170
25	24	Personal char. of succ. ent.	38	3.658	.177
26	14	Self-image building	38	3.632	.184
27	35	Calculating/understanding financial ratios	38	3.605	.185
28	26	Periodic org. reviews	38	3.579	.151
	25	Pricing	38	3.579	.151
30	27	Advertising campaigns	38	3.553	.166
31	39	Employee training/development	38	3.553	.172
32	40	Safety standards/practices	38	3.526	.186
33	18	Consumerism--trends/principles	38	3.316	.163
34	22	Basic purchasing prin./prac.	38	3.237	.179
35	19	Unique aspects of family firms	38	3.211	.199
36	38	Choosing form of ownership	38	3.158	.196
37	21	Role/importance of small bus.	38	3.105	.207
38	36	Inventory control principles	38	3.053	.191
39	20	Security issues	38	3.053	.193
40	37	Determ./planning physical fac.	38	3.026	.187

TABLE A.10
RANKINGS OF TOPICS BY ENTREPRENEURIAL TYPE --
ENTREPRENEURS WITH CURRENT FIRM MORE THAN ONE YEAR

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
1	12	The customer service function	570	4.519	.032
2	1	Motivating employees	558	4.500	.039
3	2	Recordkeeping requirements	573	4.356	.034
4	4	Social resp./bus. ethics	566	4.270	.037
5	10	Cash mgmt.: cash flow princ.; budget/forecast.	569	4.234	.037
6	9	Problem solving/decision making techniques	569	4.144	.035
7	15	Cash management: working capital requirements	569	4.107	.039
8	5	Devel. mktg. plans/strat.	569	4.030	.038
9	32	Communications skills	568	4.014	.042
10	34	Team building skills	568	4.004	.043
11	3	Merchandise layout	570	3.982	.048
12	23	Goal setting: planning/ forecasting/budgeting	569	3.975	.040
13	13	Reasons for SBM succ./fail.	563	3.945	.045
14	8	Understanding/interpreting financial statements	570	3.942	.040
15	25	Pricing	572	3.920	.043
16	16	Public relations	568	3.880	.041
17	7	Evaluation of employees	565	3.844	.043
18	24	Personal char. of succ. ent.	568	3.822	.046
19	33	Designing/maintaining the accounting system	571	3.797	.044

(Table A.10, continued)

<u>Rank</u>	<u>Topic Number</u>	<u>Topic</u>	<u>N</u>	<u>Mean</u>	<u>Std. Error</u>
20	14	Self-image building	569	3.768	.048
21	17	Coping with change/uncert.	569	3.764	.040
22	39	Employee training/development	570	3.754	.044
23	6	Basic economic principles	569	3.743	.041
24	28	Personal selling techniques	571	3.734	.046
25	40	Safety standards/practices	569	3.689	.048
26	31	Hiring practices/requirements	568	3.650	.045
27	29	Payrolls: Wage/salary admin.	571	3.636	.044
28	11	Problems/operating strategies for specific business types	557	3.632	.043
29	30	Payrolls: preparation/tax and benefit laws	568	3.588	.048
30	27	Advertising campaigns	570	3.519	.043
31	22	Basic purchasing prin./prac.	571	3.497	.046
32	26	Periodic org. reviews	572	3.490	.039
33	36	Inventory control principles	571	3.485	.049
34	35	Calculating/understanding financial ratios	571	3.482	.048
35	18	Consumerism--trends/principles	569	3.466	.042
36	19	Unique aspects of family firms	562	3.388	.052
37	21	Role/importance of small bus.	569	3.376	.053
38	38	Choosing form of ownership	570	3.354	.051
39	37	Determ./planning physical fac.	568	3.336	.048
40	20	Security issues	569	3.295	.050