APPAREL MANUFACTURERS' PERCEPTIONS OF ORGANIZATIONAL CHARACTERISTICS, ORGANIZATIONAL STRATEGY, COMPETITIVE METHODS, AND ORGANIZATIONAL PERFORMANCE

By

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CHAPTER I

INTRODUCTION

During the 1990s, the growth of the apparel industry in the United States (U.S.) has slowed. Industry analysts have blamed problems related to excessive inventories, declining consumer expenditures on clothing, and increased competition from overseas for the slow growth (Kurt Salmon Associates, 1994). The American Apparel Manufacturers Association (AAMA) reported that in 1993, apparel manufacturers' sales declined an average of 20% from 1992; yielding $41 billion at wholesale and $129 billion in retail nationwide (McCrary, 1994). This decline in sales presents a significant reason for studying the industry since traditionally apparel manufacturing has been a major employer and contributor to the economy.

In addition, over the past decade, the number of apparel plants operating in the U.S. has dropped by 14%, from 26,505 to 22,872 (McCrary, 1994). Thus, apparel manufacturers in the South have experienced many employment problems because of their high concentration of plants, *i.e.*, worker lay offs and plant closings; while manufacturers in the Northwest perceived the delayed

deliveries and quality problems from offshore operations as an opportunity for positive growth in apparel (Foxenberger, 1994). In retrospect these apparel manufacturers have responded to their unique industry problems with a set of alternative solutions which will impact the way they compete now and in the future. This provides another reason for researching competitive methods by which manufacturers may compete in the apparel industry to improve their organizational performance.

Justification for the Study

As evidence for this study, competitive methods and organizational performance, which have been examined extensively in strategic management literature and sparsely in apparel, continue to emerge as significant to the apparel industry. Studying the views of apparel manufacturers in the U.S. on organizational strategy and performance will provide national results to better understand the competitive methods emphasized in the industry; whereas, in the past, other researchers have frequently conducted regional and statewide studies of apparel manufacturers.

The implications from this study will guide apparel manufacturers when adapting their organizational strategies to the emerging industry conditions in the new millennium. This is important since apparel manufacturers across the nation indicate a new vision for revitalizing domestic

manufacturing in the future. Thus, this study will contribute descriptive data important to manufacturers by providing nationally sampled results for establishing their competitive methods and comparing their organization's performance relative to competitors. And at the same time, researchers and educators will benefit from the reported results when serving students and manufacturers because of the strategic implications for analyzing and improving organizational performance in the competitive apparel industry environment.

Purpose of Study

The purpose of the study was to investigate the views of apparel manufacturers on organizational strategy and performance. Organizational characteristics and competitive methods described by these U.S. manufacturers of women's, misses', and junior's outerwear were determined. The differences among the strategic type (organizational strategy) classifications in relation to selected organizational characteristics, competitive methods, and performance variables were also investigated.

The study was designed to extend two strategic management studies in which strategic type (organizational strategy) classifications and competitive methods from different industries were explored (Conant, Mokwa, & Varadarajan, 1990; McDougall & Robinson, 1991). The primary

focus of the research was the description of organizational strategy alternatives selected by apparel manufacturers within each strategic type classification, as well as the different competitive methods emphasized within each strategic type classification. The study expands the existing body of research to include perceptions on organizational performance relative to other apparel manufacturers as assessed by owners, presidents or managers. These apparel manufacturers were representative of small and large organizations from across the nation which had been in business between one and 15 years or more.

Objectives of the Study

The objectives of the study were:

1. To determine the organizational characteristics, organizational strategy, competitive methods, and organizational performance of selected apparel manufacturers.

2. To determine the strategic type (organizational strategy) classifications of selected apparel manufacturers according to the Miles and Snow (1978) adaptive cycle and strategic typology.

3. To determine whether the strategic type (organizational strategy) classifications of selected apparel manufacturers vary in relation to organizational

characteristics, competitive methods, and organizational performance.

Research Questions and Hypotheses

To accomplish the objectives of this study the research was designed to answer two research questions and test four hypotheses. The research questions and hypotheses were formulated from related research findings in the strategic management literature. The research questions were:

1. What are the strategic type (organizational strategy) classifications of apparel manufacturers producing women's, misses', and junior's outerwear in the U.S.?

2. What are the differences among the strategic type classifications of apparel manufacturers producing women's, misses', and junior's outerwear in relation to their organizational characteristics, competitive methods, and organizational performance?

The hypotheses were:

H1: There are no significant differences among the observed and expected frequencies of the strategic type (organizational strategy) classifications.

H2: There are no significant differences among the observed and expected frequencies of the strategic type (organizational strategy) classifications in relation to selected organizational characteristics.

H3: There are no significant differences among the means of the strategic type (organizational strategy) classifications in relation to selected organizational performance variables.

H4: There are no significant differences among the means of the strategic type (organizational strategy) classifications in relation to selected competitive methods.

Research question one was descriptive in nature. Descriptions of the strategic type classifications in the health maintenance industry have been the focus of previous research (Conant, Mokwa & Varadarajan, 1990). This study extends the single industry research conducted to include the perceptions of manufacturers in the apparel industry.

Research question two was also based on research findings from Conant *et al.* (1990) and McDougall and Robinson (1991). Conant *et al.* explored the differences among the strategic type classifications in relation to organizational performance, while McDougall and Robinson examined the differences among the competitive methods emphasized in the information processing industry. Conant *et al.* indicated that three "pure" strategic types (defenders, prospectors, and analyzers) performed equally well in terms of profitability and outperformed reactors (*p.* 365).

Hypothesis H2 compared the differences between the strategic type classifications in relation to eight

organizational characteristics. Two of the organizational characteristics were used as objective evaluations of organizational performance, *i.e.*, total number of employees and annual sales volume (optional). In contrast, hypothesis H3 addressed the subjective evaluations of organizational performance. Conant *et al.* (1990) suggested that subjective evaluations of performance, *i.e.*, profitability and overall firm performance, were fairly consistent with objective performance measures. Thus, the researcher examined the differences among the strategic type classifications using both objective and subjective evaluations of organizational performance. Two studies revealed that "pure" strategic types in apparel retailing (Conant, Smart & Solano-Mendez, 1993, *p.* 254) and strategic groups with at least "one generic strategy" in an unrelated industry (Dess & Davis, 1984, *p.* 467) outperformed other competitors in terms of profitability. (See Hypothesis H4.) The researcher proposed that the combination of objective and subjective evaluations on organizational performance in this national study will support the findings of previous research from different industries, while strengthening the variety of measures on performance relevant to apparel manufacturers.

Limitations

Several factors limited the scope of the research. They were as follows:

1. The sample was limited to apparel manufacturers listed in a prospect list purchased from a direct marketing firm.

2. The participants in the study were limited to manufacturers producing women's, misses', and junior's outerwear apparel products identified by standard industrial classification (SIC) codes of 2331, 2335, 2337, and 2339.

3. The participants' sensitivity to providing data concerning the annual sales volume (optional) limited the measures of organizational performance to the owner's, president's or manager's subjective perception on three selected variables: profitability, return on investment, and overall firm performance.

4. The data concerning the strategic type classifications resulted in a disproportionate representation of the organizational characteristics which limited the application of chi square statistic tests. These data were used only for a descriptive comparison of differences among the strategic type classifications relative to the classification, SIC, job title/position, highest level of education, and region variables.

Assumptions

In the present study, the researcher assumed that apparel manufacturers across the nation could describe their organizational strategy, competitive methods, and

performance relative to other competitors. It was also assumed that a common understanding would exist regarding the organizational strategy alternatives, competitive methods emphasized, and performance measures utilized by respondents; hence, definitions for strategy, competition, and performance were not given in the questionnaire.

Definition of Terms

The following terms are defined as used in the study:

Adaptive Cycle - The three problems organizations encounter when adjusting to their environment:

a. The Entrepreneurial Problem - The choice of product and market.

b. The Engineering Problem - The choice of technology for production and distribution.

c. The Administrative Problem - The choice of structure, process, and innovation.

Each of the entrepreneurial, engineering, and administrative problems includes a set of alternative solutions which are used to determine the strategic type classifications (STCs) for organizations in an industry (Miles & Snow, 1978).

Apparel Manufacturers - Organizations producing clothing by cutting and sewing purchased woven or knit textile fabrics and related materials, *i.e.*, leather and rubberized fabrics, plastics, and furs. Apparel

manufacturers perform all of the assembling of products within their own plant(s) (Oklahoma Department of Commerce, 1990). For the purposes of this study apparel manufacturers are synonymous with manufacturers.

Competition - The condition of an industry depends on five competitive forces: (a) threat of new entrants, (b) bargaining power of buyers, (c) bargaining power of suppliers, (d) threat of substitute products or services, and (e) rivalry among existing firms (Porter, 1980).

Competitive Methods - The different ways or means by which organizations may compete. Owners, presidents, and managers indicated the emphasis their organization placed on 26 competitive methods when compared to other apparel manufacturers within the industry (McDougall & Robinson, 1991). For the purposes of this study competitive methods are synonymous with distinctive competencies.

Contractors - Organizations which produce or assemble clothing products from materials owned by other apparel manufacturers (Oklahoma Department of Commerce, 1990). A contractor performs part or all of the assembling of an apparel manufacturer's product, *i.e.*, cut, make or trim.

Large Manufacturers - Organizations with 100 or more employees (U.S. Small Business Administration, 1989). For the purposes of this study large manufacturers are synonymous with large organizations.

Organization - "An organization is both an articulated purpose and an established mechanism for achieving it" (Miles, Snow, Meyer & Coleman, 1978, *p.* 3), based on the interrelationships among strategy (product-market domains), structure (characteristics), and processes (systems for coordination and control).

Organizational Performance - Profitability, return on investment, and overall firm performance are indicators of organizational performance (Conant et al., 1990). The performance variables were defined as follows:

a. Profitability - The net-profit margin is calculated by dividing operating profits (revenues minus cost of goods sold and all expenses) by sales. Profitability is a reliable indicator of how much cash an organization has after expenses (Boseman & Phatak, 1989).

b. Return on Investment (ROI) - The ROI percentage is calculated by dividing pretax net profit by net worth (total assets minus total liabilities). ROI is the relationship between organization profits and investment in capital expenditures, *i.e.*, land, buildings, and equipment. The ROI indicates the amount of capital an organization is getting back relative to the amount of capital invested into the organization (Boseman & Phatak, 1989).

c. Overall Firm Performance - The subjective outcome assessment indicating whether an organization's overall firm

performance ranged from much worse to much better than other apparel manufacturers (Conant et al., 1990).

For the purposes of this study organizational performance is synonymous with performance.

Organizational Strategy - A pattern of interrelated decisions regarding product-markets, structures, and processes to match organizational resources with environmental opportunities (Andrews, 1987). Mintzberg's (1987) five definitions of strategy as plan, pattern, position, perspective, and ploy are defined as follows:

a. Strategy as Plan - A "*consciously intended* course of action" (*p.* 14).

b. Strategy as Pattern - A "*consistency* in behavior, *whether* or *not* intended" (*p.* 14).

c. Strategy as Position - A "means of identifying where an organization . . . locates itself in . . . an 'environment' . . . a market . . . . or 'match' between organization and environment . . . between the internal and the external context" (*p.* 17).

d. Strategy as Perspective - A "*concept* . . . . shared by the members of an organization . . . the *collective mind* - individuals united by common intention and/or action" (*p.* 18).

e. Strategy as Ploy - A "specific 'maneuver' intended to outwit . . . [a] competitor" (*p.* 14).

For the purposes of this study organizational strategy is synonymous with strategy.

Small Manufacturer - Organizations with 99 or fewer employees (U.S. Small Business Administration, 1989). For the purposes of this study small manufacturers are synonymous with small organizations.

Strategic Choices - Organizations make decisions from a set of alternatives in the strategy formulation process (Andrews, 1987; Mintzberg, 1990).

Strategic Typology - The four classifications for different types of organizations based on their adaptive behaviors:

a. Defenders (Ds) - Emphasize engineering solutions to control costs for producing stable products and penetrating existing markets.

b. Prospectors (Ps)- Emphasize entrepreneurial behaviors to continuously monitor market trends for developing new product and market opportunities.

c. Analyzers (As) - Emphasize a combination of entrepreneurial and engineering alternatives to penetrate stable product-markets while developing newer product-markets.

d. Reactors (Rs) - Emphasize transient/inconsistent entrepreneurial, engineering, and administrative solutions to their problems (Miles & Snow, 1978).

For the purposes of this study the strategic typology is synonymous with the strategic type classifications (STCs).

Subcontractors - Organizations which perform the entrepreneurial functions of an apparel manufacturer, *i.e.*, designing patterns, sewing samples, and finishing garments or highly specialized functions for other contractors, *i.e.*, permanent pleating (Oklahoma Department of Commerce, 1990).

Organization of the Study

The organization of the study follows the guidelines for the one article format. Chapter I briefly presents the justification for this study. Chapter II includes the review of literature, theoretical rationale, and related research in strategic management and apparel manufacturing. The methodology and procedures used in this research will be described in Chapter III. Chapter IV consists of a manuscript in which hypotheses H1 through H3 are discussed. Then hypothesis H4 is discussed in Chapter V. The article was written according to the preparation guidelines in the International Textile Apparel Association (ITAA) *Clothing and Textiles Research Journal*. Chapter V includes a discussion, summary of competition in the apparel industry, and recommendations for future research that might be conducted in the area of apparel manufacturing.

CHAPTER II

REVIEW OF LITERATURE

The shifting apparel industry conditions influence an apparel manufacturers' choice of competitive methods and evaluation of organizational performance. As apparel manufacturers shift from seasonal lines and volume production to better service, smaller orders, and more frequent shipments they will need to develop new strategies and measures of performance. According to Kurt Salmon Associates, manufacturers "will shift their focus from doing it all to doing what they do best" (Webb, 1994, *p.* 2). As a result, apparel manufacturers are predicted to place higher levels of emphasis on product customization, customer service, and forward integration in the new millennium. In addition, manufacturers will measure product development and production cycle times, the percentage of orders shipped complete or on schedule, and inventory turns because they understand their impact on the organization's performance (Kurt Salmon Associates, 1994). Thus, a large number of manufacturers are competing in the slow-growing U.S. market challenged by foreign products, while adapting their

distinctive competence and organizational strategy for a profitable performance as the new millennium is approaching.

Background Literature

Strategic Management

The study of strategic management began in the 1960s with substantial literatures which were prescriptive in nature. As a foundation Selznick (1957) introduced the concept of distinctive competence, *i.e.*, superior skills, while Chandler (1962) popularized the word strategy. In prescribing how strategies should be formulated Stevenson (1976) put forth defining corporate strengths and weaknesses; whereas Christensen, Andrews, Bower, Hamermesh, and Porter (1982) developed an "economic strategy . . . the match between qualifications and opportunity that positions a firm in its environment" (*p.* 164). Underlying the formation of strategy Christensen *et al.* identified an informal design process based on conscious thought. In contrast, Ansoff (1965) viewed strategy formation as a formal planning process. The Ansoff model included 57 boxes with programming techniques for planning corporate, business, or functional strategies.

In the 1970s, the prescriptive perspectives on strategy formation were concerned with the content of strategies, particularly the content research by Schendel and Hofer (1979), from the Purdue University Krannert School, on

strategic groups within an industry that follow similar organizational strategies. Likewise, both the growth-share matrix by the Boston Consulting Group (1975) and the profit impact of market strategy (PIMS) data base from Schoeffler, Buzzell, and Heany (1974), provided a basis for Porter's (1980) generic strategies. As an analytic process the selection of generic strategies paralleled the militaristic perspective on strategic positions. In the 400 B.C. military writings of Sun Tzu (1971) an optimal strategy dealt with warfare, whereas, the contemporary research of Katz (1970) and Quinn (1980) related the literature of military strategy to business.

During the 1980s, the descriptive perspective within strategic management increased to explain how strategies were actually made. Mintzberg (1990) distinguished six descriptive perspectives to better understand the process of strategy formation. Specifically, an entrepreneurial point of view was associated with a visionary leader (Schumpeter, 1934; Cole, 1959) followed by a cognitive perspective based on the attainment of concepts, involving strategic thinking and reframing (Simon, 1945; Weick, 1979).

In comparison, the following four descriptive perspectives extend beyond the strategist's mental process to integrate a collective system of other forces and actors. For example, from a learning point of view strategies emerged as an organization adapted to the environment

(Lindblom, 1959; Quinn, 1980). Similarly, the political perspective exploits power within an organization or reflects power by the organization whether legitimate or illegitimate with regards to the external environment (Allison, 1971; Pfeffer & Salanick, 1978). In contrast, the cultural view of strategy formation is based on the beliefs shared by members of an organization, *i.e.*, the ideology (Rhenmann, 1973; Norman, 1977); whereas, the environmental point of view on strategy formation is passive because power rests in the environment forcing an organization to chose a strategic position or perish (Aldrich & Pfeffer, 1976).

Lastly the configuration perspective clustered the strategy formation processes, content of strategies, structures, and contexts of organizations as distinct episodes or stages over time. This descriptive perspective integrated Chandler's (1962) conclusion that structure follows strategy, stimulated Mintzberg's (1979) research on configuration, spawned Miles and Snow's (1978) strategic typology of defenders, prospectors, analyzers, and reactors, supported Miller and Friesen's (1982) concept of quantum change, and contributed to Hambrick's (1984) positioning research on strategic groups, generic industries, and strategy life cycles.

A review of literature from the past three decades on strategic management led Mintzberg (1994) to state that "*strategic planning* is not *strategic thinking*" (*p.* 107). He

also stated "When companies [organizations] understand the difference between planning and strategic thinking, they can get back to what the strategy-making process should be: capturing what the manager learns from all sources (both the soft insights from his or her personal experiences and the experiences of others throughout the organization and the hard data from market research and the like) and then synthesizing that learning into a vision of the direction that the business should pursue" (Mintzberg, 1994, *p.* 107).

In the 1990s the study of strategic management should continue to emphasize "there is no 'one best way' to create strategy, nor is there 'one best form' of organization" (Quinn, Mintzberg & James, 1988, *p.* xvii). But to enhance the competitiveness of an organization in the new millennium strategic programming must be emphasized. Mintzberg (1994) articulated three ways to carry out an organizational strategy via codification, elaboration, and conversion. In strategic programming codification involves clarifying strategies, elaboration means specifying what must be done, and conversion involves changing the organization's operations. He contends strategies that are programmed as broad visions will enable an organization to adapt in a changing industry environment.

Apparel Manufacturing

Ten years have elapsed since Sproles (1984) espoused "our success in the future [of clothing and textiles] will be based significantly on the accuracy of our competitive analysis of situations and the competitive responses we generate in the form of adaptive competitive strategies" (*p.* 30). To understand the dynamics of competition for developing successful adaptive competitive strategies in academia, he cited references from several areas, such as Machiavelli's (1980) military strategy and Porter's (1980) *Competitive Strategy*. From a broader perspective, Branson and Jolly (1984) advocated that "we should be looking out of a 'strategic window' studying our environment and assessing what we should do to stay successful and competitive in a changing world" (*p.* 37). The authors recommended a formal strategic planning process to activate viable strategies for competing in the dynamic academic and industry environment.

Over the past decade, a select number of clothing and textiles researchers have responded to these strategic planning challenges. Eight single state studies of apparel manufacturers and four structural analyses of the industry were reviewed to determine the role of strategic management in related research published in the *Clothing and Textiles Research Journal* (*CTRJ*).

During the second half of the 1980s two studies were conducted to investigate the marketing information

assistance and computer technology usage of apparel manufacturers in New York and Louisiana, respectively. McDowell and Hester (1986) found the development of manufacturing strategies were reported as the most necessary type of assistance by apparel contractors in New York State, while the small apparel manufacturers identified the need for very specific marketing information. Marketing research, information on trends, and data on imports for specific product classifications were cited as ways in which academic programs could assist these 89 organizations. In the state of Louisiana, Belleau and Didier (1989) found that 43 small and medium-sized apparel manufacturers performed many of their design/production processes manually. These manufacturers indicated a lack of capital to invest in computer-aided design/computer-aided manufacture (CAD/CAM) systems. However, both of these state-wide samples of apparel manufacturers were interested in academic assistance relating to computer technology transfer. Belleau and Didier concluded that this type of assistance would enable the manufacturers to respond to domestic retailers with a quick turnaround and to compete more successfully with overseas contractors.

In 1990, Forney, Rosen, and Orzechowski's article in the *CTRJ* provided a summary of dialogue with nine domestic and nine overseas apparel manufacturers based in the San Francisco Bay Area. A content analysis of each interview

indicated that for the domestic manufacturers the most important criterion for production site selection was lead time; whereas, for the overseas manufacturers the most important criterion was cost. Also both groups identified quality control and sourcing as important. They indicated that greater flexibility in domestic sourcing and production would increase the American apparel industry profits in the future. The researchers recommended several changes for American textile mills and suppliers to bring sourcing and production back to the U.S. For example, lowering the minimum orders of materials and offering a variety of fabrics at competitive prices might increase the profitability of the apparel industry.

In the same *CTRJ* issue, Collier and Collier (1990) analyzed the application of CAD/CAM technology in the textile and apparel industry. Significant implications were related to the limited amount of U.S. versus foreign innovation and integration of CAD/CAM. Technology transfer in Japan and in both Western and Eastern Europe appeared to be more successful than in the U.S. The researchers emphasized that the facilitation of linkages between textile and apparel production and distribution provides a viable opportunity for research by industry analysts in the U.S.

In addition, Hamilton and Dickerson (1990) analyzed the social costs and benefits associated with economic shifts in international textile and apparel trade. As a practical

example, when the industrialization of both developed and developing countries is sufficient, then the workers within a specific organization and/or state system become unproductive and too costly. Thus, the researchers posed a question, "What will lead to improved systematic changes in such a tangled web, one in which the players operate with different rules and abilities, in which policy makers often ignore the pleas of those who are most affected by policy, and in which individuals are dependent on some larger corporate/political systems that compete with another one for attention and privilege?" (*p.* 20). One response was to broaden the comprehension of international textile trade among policy makers. A second response was to analyze the costs and payoffs of social, political, and economic issues relative to their organization's short-term and long-term benefits and/or competitive strategies.

Balkwell and Dickerson (1994) analyzed apparel production in the Caribbean. Since the Caribbean Basin has become the fastest growing apparel assembly region for U.S. manufacturers the costs and benefits to both domestic producers and host countries were researched. The tariff and quota provisions make the Caribbean Basin a desirable site for U.S. apparel assembly operations, while the Enterprise for the Americas Initiative added diplomatic incentives. This enables manufacturers to compete more

effectively with low cost imports from non-Caribbean countries, i.e., the Far East.

During 1991, Dickerson co-authored two other *CTRJ* articles addressing apparel manufacturers' perceived needs in making their organizations more viable and competitive and their perceptions of supplier-retailer relationships. In both studies 93 organizations representing 65% of Missouri's rural apparel manufacturing population responded to a mailed questionnaire. Results indicated that manufacturers' ranked their organization's primary needs as improving competitiveness in marketing and increased productivity. Dickerson, Dalecki, and Meyer (1991) discussed possible ways in which universities may assist apparel manufacturers to remain a competitive and viable part of rural economies. As an innovative example, textile and apparel faculty with marketing expertise can sponsor a state-wide event for apparel producers. This would provide an alternative information source for adapting competitive strategies to the apparel industry from a specialized perspective other than what faculties in business schools have to offer.

Dickerson and Dalecki (1991) found that large apparel manufacturers (with 100 or more employees) reported fewer difficulties in marketing to retailers and in working with mass merchandisers than did small apparel manufacturers. Similarly, manufacturers operating at higher capacity

utilization rates experienced fewer difficulties in their relationships than did producers operating at lower levels. Also, the small producers felt the impact of imports more severely. Apparel manufacturers in the study identified lower prices and improved products and services, *i.e.*, quick response, as the primary means of improving their organization's ability to market to U.S. retailers. The researchers advocated an increased emphasis on a stronger marketing orientation and on developing more cooperative supplier-retailer relationships as one of the best strategies for resolving the import problems in the highly competitive domestic apparel industry.

A structural analysis of the declining domestic leather industry and two state-wide studies of apparel manufacturers in North Carolina were featured in the *CTRJ* during 1993. A fourth article addressed data specifications needed by apparel manufacturers and retailers to offer competitively priced customized garments using computers. In this article DeLong, Ashdown, Butterfield, and Turnbladh (1993) suggested that new computer systems incorporating customer's ease preferences will be necessary to quickly and efficiently manufacture custom-fitted clothing, *i.e.* women's pants.

In the related research article on structural analysis, Eberspacher (1993) assessed both the domestic apparel and leather industries as undergoing a period of change. She suggests that the revitalization of a production base in the

U.S. would require suppliers and retailers to seek sources either domestically or as close to home as possible. For example, Eberspacher proposed one strategic plan combining the low-cost, highly productive labor in Mexico with Texas-based manufacturing plants for a competitive advantage in the domestic finished products market.

Adoption of quick response (QR) is another competitive way to adjust to the changing environment in the domestic apparel industry. Although QR has proven financial benefits less than one half of U.S. apparel manufacturers have implemented this management system (Ernst & Young, 1990). Recently, Kincade and Cassill (1993) reported that large manufacturers (with 100 or more employees) had the highest levels of adoption of Inventory Control and Shade Sorting technology, while smaller manufacturers often do not have the capital to invest in the equipment needed for some QR technologies. These findings were consistent with the opinions of apparel and textile industry analysts (Ernst & Young, 1990).

Also significant differences existed between manufacturers of men's, women's, children's, and other merchandise categories on the adoption of QR for the technologies of Product Planning and Shade Sorting. As a response the team of researchers provided two implications for apparel manufacturers when developing strategic plans, "first, the information identified in the study can be used

to measure progress with QR adoption. . . . Second, apparel manufacturers can use this information to examine where others in their segment are positioned with QR" (*p.* 29). Both the American Apparel Manufacturers Association (1987) and Kurt Salmon Associates (1987) view QR as a win/win strategy for textile and apparel manufacturers, retailers, and consumers.

To adapt to new technologies and manufacturing processes, Staples (1993) examined the fashion change frequency and organizational strategy of 50 North Carolina manufacturers producing women's and children's apparel. The results indicated that apparel manufacturers with high fashion change frequency and hybrid analyzer strategies required patternmakers with strong patternmaking skills. A broad range of patternmaking skills, as opposed to general manufacturing skills, will be required in an organization where the external environment and organizational strategy require frequent pattern changes to minimize risk while maximizing profit. In contrast, the manufacturers with low fashion change frequency and stable defender strategies require patternmakers with diverse pre-production manufacturing skills and minimal patternmaking skills to maximize profit and minimize risk (Staples, 1993). Most recently, Oliver, Kincade, and Albrecht (1994) analyzed the efficiencies of three production systems used in the apparel industry: bundle, kanban, and modular. The team of

researchers emphasized that "the choice of production system used by a manufacturer should fit its strategic plans, its product and the market it serves" (*p.* 45). Results indicated that a "team" system was most efficient relative to work-in-process levels; whereas, modular manufacturing increased employee morale, productivity, and product quality with decreased efficiencies for work-in-process levels. The researchers concluded that manufacturers need to determine which system is best for them based on their organizational strategy, competitive methods, and performance measures.

Theoretical Rationale

A collection of theoretical frameworks have been developed and published in the strategic management literature. A theoretical framework based on the configurational perspective in strategic management has been integrated for the purpose of this study. The Miles and Snow (1978) adaptive cycle and strategic typology provided alternative ways in which organizations adjust to their environment and pursue a strategy. This theoretical framework addressed both the organizational adaptation process and the strategy formulation process for organizations to compete effectively and perform efficiently in an industry. An explanation of the theoretical framework will be discussed in the article presented in Chapter IV.

Related Research

The related research on organizational characteristics, organizational strategy, competitive methods, and organizational performance have been described in Chapters IV and V. Recent research studies, though limited in the area of apparel manufacturing, have reviewed the importance of strategic type classifications to the study of organizational strategy (Hambrick, 1984); particularly since the purpose of strategy is to position an organization within an industry to achieve a competitive advantage in the marketplace (Porter, 1980). As stated in Chapters IV and V, a combination of strategic choices and/or competitive methods can contribute to the formulation of an organizational strategy to outperform other competitors. Dess and Davis (1984) and Conant, Smart, and Solano-Mendez (1993) have consistently reported that organizations with an identifiable strategy both emphasize distinctive competencies and perform better.

To date, however, the competitive methods emphasized and organizational performance perceptions have not been studied in apparel manufacturing; nor have they been evaluated using a strategic type classification framework based on a comprehensive set of entrepreneurial, engineering, and administrative problems with alternative solutions (Conant, Mokwa, Varadarajan, 1990; McDougall & Robinson, 1990). In addition, no study focusing

specifically on the competitive methods emphasized and organizational performance of apparel manufacturers within each strategic type classification was found. Further references will be discussed in the related research section included in Chapter IV.

Summary

There is need for strategic management research in the highly specialized field of apparel manufacturing. A theoretical framework commonly cited in the study of organizational strategy since the 1980s was developed by Miles and Snow (1978). The adaptive cycle and strategic typology proposed by Miles and Snow do not address all of the configurational dimensions that may be important in strategy formation; however, they do contribute key concepts relevant to the configurational perspective underlying the classification of organizations in the strategic management literature. A review of recent research studies concerning apparel manufacturer's perceptions on organizational strategy revealed that only two researchers used a strategic type classification as a theoretical framework to guide their research (Ko & Kincade, 1993; Staples, 1993). The other studies integrated either an array of strategic management perspectives or no theoretical rationale was cited.

For the purpose of this study, the more holistic perspective provided by the Miles and Snow (1978) theoretical rationale was the most appropriate. Due to the nature of competition in the apparel industry, it is important to examine both the organizational strategy and the competitive methods emphasized. Although the framework is based on other configurational studies in different industries, such as the manufacturing of heavy-duty pumps and components for fluid-movement systems, it does provide a facet for exploring the strategy formulation process in apparel manufacturing. In addition, the dynamic environmental conditions associated with the apparel industry have been recognized by the researcher and are specifically addressed throughout the theoretical descriptions and explanations found in Chapter IV.

CHAPTER III

METHODOLOGY

The purpose of the study was to examine the organizational characteristics, organizational strategy, competitive methods, and organizational performance of selected apparel manufacturers. A second purpose was to determine the strategic type (organizational strategy) classifications of selected apparel manufacturers according to the Miles and Snow (1978) adaptive cycle and strategic typology. The third purpose was to determine whether the strategic type (organizational strategy) classifications of selected apparel manufacturers vary in relation to organizational characteristics, competitive methods emphasized, and organizational performance.

A review of the current literature supported the existence of significant differences among these variables. The majority of studies exploring these variables have queried health maintenance organization marketing directors, new venture information processing executives, and small business apparel retailers. Few investigations have included apparel manufacturers, especially owners, presidents, or managers. The strategy formulation nature of

the manufacturing executive's position lends justification for this sample survey.

To examine the stated purposes, research procedures were accomplished as described in the following sections. The first section of this chapter describes the sample population selected for the study. The second section describes the research instruments included in Appendix A. Next, the data collection methods and statistical procedures used to test the hypotheses are discussed. Further discussion of the research methodology will be described in Chapter IV.

Population and Sample

The population for the study included apparel manufacturers located in the United States (U.S). Those manufacturers included in the population were producers of women's, misses', and junior's outerwear (with SIC codes of 2331, 2335, 2337 or 2339). These manufacturers were either small (with 99 or fewer employees) or large (with 100 or more employees) organizations. In addition, 47 states were included in the population because a national listing was purchased from a direct marketing firm. Those states not included in the sample population were Delaware, District of Columbia, North Dakota, and Alaska.

A systematic random sample of 1,634 apparel manufacturers were selected to fulfill the objectives of the

study. The purchased national frame provided a sample listing of 3,269 manufacturers with names and addresses of owners, presidents, or managers in addition to SIC codes. A random number was identified by the researcher to select every second manufacturer on the sample listing. All 1,634 apparel manufacturers included in the study were mailed a survey. In addition, the researcher was alerted, from the lower than average response rates of other national studies in the apparel industry, to select as large a sample size as was economically feasible (Phillips & Sternquist, 1994).

Instruments

Further consideration of the purposes of the study and sample characteristics guided a review of literature for appropriate measurement instruments. Four previously tested instruments were identified to measure organizational characteristics, organizational strategy, competitive methods, and organizational performance in this study. A collection of organizational characteristics developed by Huddleston and Pysarchik (1987) were adapted to measure the demographics of the selected apparel manufacturers. The Conant, Mokwa, and Varadarajan (1990) 11 item-scale was used for measuring organizational strategy because the reliability coefficients were significant and the Miles and Snow (1978) adaptive cycle and strategic typology was used as a theoretical base. Likewise, a valid semantic

differential scale was selected for measuring 26 competitive methods (McDougall & Robinson, 1990); whereas, the measurement of organizational performance developed by Conant et al. was modified to improve the face validity of the instrument.

To coincide with the purposes of this research, the survey instrument was divided into four sections: organizational characteristics, organizational strategy, competitive methods, and organizational performance. (See Appendix A.) Following is a description of the selected instruments and the reported reliability coefficients for each measure will be discussed.

Organizational Characteristics (Items 1-6). Six items developed by Huddleston and Pysarchik (1987) were included in the first section of the survey instrument. These items were classification, total years in business, total number of employees, annual sales volume (optional), job title/position, and highest level of education. (See Appendix A and B.) In addition, the SIC code and geographic region were collected from a sample listing (See Appendix B.) Each of the organizational characteristics represented a nominal level of measurement. See Appendix B for details concerning the other categorical responses associated with the following organizational characteristics: classification, job title/position, highest level of education, and geographic region.

Organizational Strategy (Items 7-17). The 11-item scale for operationalizing Miles and Snow's (1978) adaptive cycle and strategic typology developed by Conant et al. (1990) was chosen as the appropriate measure of organizational strategy. The initial scale consisting of four entrepreneurial items (7-10), three engineering items (11-13), and four administrative items (14-17) was developed to measure the eleven underlying dimensions in the adaptive cycle. Four categorical alternatives were included for each item to describe the adaptive behaviors of the strategic typology. A majority decision rule was used to classify the manufacturers as defenders, prospectors, analyzers, or reactors since the categorical alternatives involved a nominal level of measurement. The test-retest reliability coefficients were 0.56 to 0.82. The 11 items from the instrument are listed in Appendix A, coded in Appendix C, and tabulated in Appendix D according to the Miles and Snow adaptive cycle and strategic typology.

Competitive Methods (Items 18-43). A semantic-differential scale was developed by McDougall and Robinson (1990) to measure 26 competitive methods. Each of the scale items represented two extreme ways to compete (*e.g.*, maintain low inventory levels and maintain high inventory levels). In the initial study a seven-point Likert-type scale was used with anchors ranging from one extreme (1) to the opposite extreme (7). The present study used a five-

point response format. This decision was made because of the desire to differentiate the levels of emphasis. (See Appendix A.) Each of the competitive method items represented an interval level of measurement. An overall instrument reliability of 0.58 was reported by McDougall and Robinson. The mean values and standard deviations of each of the 26 items are presented in Appendix E.

Organizational Performance (Items 44-46). A short, two-item measure of organizational performance was designed by Conant et al. (1990). These items, profitability and return on investment (ROI), were then summed to obtain an overall measure of organizational performance. Since a reliability coefficient was not reported for the summed measure, the decision was made to eliminate the summed overall measure of organizational performance. A third Likert-type item, overall firm performance, was included to improve the face validity of the interval measures. The Conant et al. seven-point scale with anchors ranging from "much worse" (1) to "much better" (7) was adopted. The mean values and standard deviations for each organizational performance item are found in Appendix E.

Procedure

The proposed questionnaire was pilot tested by nine apparel manufacturers who were systematically selected from a sample listing. In addition, a panel of research experts

who study apparel and strategic management reviewed the instrument for content validity. Minor revisions were made to ease the completion and coding of the questionnaire. The self-administered questionnaire was in an eight-page format.

The questionnaire was then mailed to a systematically selected sample of 1,634 apparel manufacturers in the U.S. Each questionnaire included a cover letter from the researchers, a self-addressed stamped return envelope, and a reminder to return the completed survey. (See Appendix A and F.) A four digit code number was assigned to each questionnaire for follow-up purposes. As questionnaires were returned, the numbers were recorded on a master list to identify the nonrespondents prior to the follow-up mailing. Potential respondents who had not returned the questionnaire after one week were mailed a brightly colored postcard.

A follow-up questionnaire was mailed two weeks later to all potential respondents. Again, the questionnaire included a cover letter, a self-addressed stamped envelope, and a reminder to return the completed survey within a two week period. After a one week period, brightly colored follow-up postcards were mailed to those who had not yet returned the survey. The following week was designated as the final period for data collection. See Appendix F for cover letter, questionnaire reminders, and follow-up postcards.

The multi-stage mailing procedures were administered to ensure an adequate response rate for statistically analyzing the data collected. A final tabulation indicated that out of the 1,634 questionnaires mailed, 562 (34.39%) were returned by the post office as undeliverable, resulting in 1,072 (65.61%) potential participants. It is common in the apparel industry for manufacturers to come and go quickly. Since the list was received several months before the multi-stage mailing it is expected that these businesses closed or merged. Two hundred eighteen (20.33%) questionnaires were returned by participants. Among these 67 (30.73%) were not included in the study due to missing data or because they declined to participate. A total of 151 usable questionnaires were obtained for statistical analysis; resulting in an adjusted response rate of 14.09%.

Data collection began in mid June and was completed in late July. To maintain the anonymity of the participating apparel manufacturers, the cover letter ensured the completed survey would be kept confidential and the four digit code number was for follow-up purposes only. The numbers were removed from the questionnaire prior to data entry for protection of participants.

Sample Characteristics

The organizational characteristics of the respondents are described in the results section of the manuscript. The

classification, SIC code, total years in business, total number of employees, annual sales volume (optional), job title/position, highest level of education, and geographic region of the respondents also appear in frequency tables. Other information concerning the classification, job title/position, and highest level of education of the sample is presented in Appendix B. The other categorical responses associated with classification were a combination of apparel manufacturer and contractor, apparel manufacturer and subcontractor, or apparel manufacturer and import distributor.

The specified job title/position responses were varied, ranging from both owner and president to designer to vice-president of regions. (See Appendix B.) The specified degree types included Masters, J.D., and other. The major areas of the graduate degrees included business, industrial management/technology, and home economics.

The geographic information included the 34 states contained in the sample and the frequency of their representation. The following states had the greatest representation: New York (23 respondents), California (19), Pennsylvania (14), North Carolina (10). In addition, the states were divided into four regions and the regional representation was indicated. See Appendix B for the frequency distribution of geographical regions by states.

Statistical Analysis

Analysis of the data included both descriptive and inferential statistics. Frequency distributions, chi square, analysis of variance (ANOVA), and Fisher's least significant-differences (LSD) were used for statistical analysis of the data. Following is a description of the statistical methods used in testing hypotheses H1 through H4 and answering the research questions.

Frequencies and percentages were applied to describe the organizational characteristics and strategic type (organizational strategy) classifications. In addition, chi square statistic tests were performed to compare the differences between the observed and expected frequencies of the strategic type classifications (STCs) on selected organizational characteristics (H1 and H2). Likewise, chi square statistics were conducted to compare the differences between the non-respondents and respondents on selected organizational characteristics. The data collected from the organizational characteristics and organizational strategy instruments were treated as nominal data.

One-way ANOVA statistics were used to determine whether significant differences existed between the means of the STCs on three organizational performance variables. The STCs were treated as the independent variable and the dependent variables were profitability, return on investment, and overall firm performance (H3). The

procedure was repeated, with the 26 competitive methods as the dependent variables (H4). If the ANOVA test was significant, multiple comparison procedures using Fisher's least significant-difference (LSD) were performed to examine which means of the STCs were different from other means. The data collected from the organizational performance measure and the competitive methods instrument were treated as interval data to fulfill one assumption of ANOVA.

Mean values for each STC on the organizational performance variables and the competitive methods resulting from ANOVA test were analyzed. These mean values were compared to describe the organizational performance and competitive methods emphasized within each STC. As previously stated, one-way ANOVA was conducted to test hypotheses H3 and H4. Results of the analyses are reported in the following chapters.

CHAPTER IV

MANUSCRIPT

APPAREL MANUFACTURERS' PERCEPTIONS ON ORGANIZATIONAL STRATEGY AND PERFORMANCE

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Apparel Manufacturers' Perceptions on Organizational Strategy and Performance

Abstract

The researchers investigated apparel manufacturers' views on organizational strategy and performance. Miles and Snow's (1978) adaptive cycle and strategic typology provided a theoretical framework. An Apparel Industry Survey (AIS) was mailed nationwide to a systematically selected sample of 1,634 manufacturers producing women's, misses', and junior's outerwear. Frequency counts were used to categorize the respondents (N=151) into strategic type classifications (STCs) using a majority decision rule. Data analysis resulted in the following distribution: defenders (Ds, n=66), prospectors (Ps, n=18), analyzers (As, n=36), and reactors (Rs, n=31). Chi square and ANOVA statistics revealed significant differences among the STCs on one organizational characteristic and one performance variable: total years in business and overall firm performance (Ps>Ds, Ps>Rs). Organizational strategy implications for apparel manufacturers were provided.

Key Words: organizational strategy, performance, adaptive cycle, strategic typology, strategic type classifications

Apparel Manufacturers' Perceptions on Organizational Strategy and Performance

Introduction

A large number of apparel manufacturers face a slow-growing U.S. market challenged by foreign products. Despite the slow-growth, apparel manufacturers are making strategic choices for adjusting to their environment (Oliver, Kincade & Albrecht, 1994). Many domestic apparel manufacturers realize that foreign producers compete by "knocking off" popular products, using modular manufacturing systems, and paying low wages to factory workers (Black & Cedrone, 1994). They are responding to these challenges by adjusting their organizational strategy. The apparel manufacturers' strategy is defined by a pattern of strategic choices regarding product-markets, structures, and processes to match their organizational resources with environmental opportunities (Andrews, 1987).

New product development, flexible manufacturing systems, and administrative expenses affect organizational strategy in the apparel industry. Recently, *Bobbin* featured London Fog's strategic choice to reposition its brand labels by reengineering all operations using activity-based costing and management processes (Cedrone, 1994). Similarly, *Apparel Industry Magazine* reported that domestic apparel

manufacturers from the West Coast to Miami are managing a comeback by focusing on product diversity, special market needs, information technology systems, and quick turn-arounds (Foxenberger, 1994; Moore, 1994). Both of these publications featured different organizational strategies effectively used by apparel manufacturers for adapting to their environments.

Purpose

In this study the researchers investigated apparel manufacturers' views on organizational strategy and performance. The first purpose of this study was to determine the strategic type (organizational strategy) classifications of selected apparel manufacturers according to the Miles and Snow (1978) adaptive cycle and strategic typology. A second purpose was to determine whether the strategic type (organizational strategy) classifications of selected apparel manufacturers vary in relation to organizational characteristics and performance.

Theoretical Framework

Miles and Snow's (1978) adaptive cycle and strategic typology provided the theoretical framework. The adaptive cycle explains how organizations adjust to their dynamic environments; whereas, the strategic typology classifies different types of organizations based on their adaptive

behaviors. In *Perspectives on Strategic Management*, Mintzberg (1990) critiqued the Miles and Snow strategic typology of prospectors, defenders, analyzers, and reactors as one of the "best known" and "spawning" typologies in the literature of organizational theory (*p*.186).

Theoretical and research foundations for developing the adaptive cycle and strategic typology were cited by Miles and Snow (1978). Both Chandler's (1962) configurational approach to strategy and structure and Child's (1972) classic conceptualization of strategic choices were cross-referenced. Child's strategic choice approach proposed that organizations make decisions that influence their structure, process, and environment. Chandler's configurational approach proposed that structure follows strategy. He concluded from a study of 100 organizations that structure and strategy must be co-aligned for an organization to be effective. Likewise, Miles and Snow inferred from their research the need for consistencies in the alignment of organizational strategy, structure, and process.

Miles and Snow's (1978) theoretical framework deals with the interrelationships among strategy, structure, and process. Their view of strategy is based on Mintzberg's (1988) definition, "strategy is a pattern in a stream of actions" (*p*. 4). By this definition, organizations make major and minor decisions about their product-market domains. From Miles and Snow's perspective, these strategic

decisions result in consistent behaviors when they are implemented through the organization's structure and processes. Through structure and processes an organization's administrative system is established to coordinate and control internal operations with environmental opportunities. Specific actions, roles, relationships, decision-making processes, and control mechanisms are established, monitored, and modified to complement the organizational strategy.

Adaptive Cycle

The adaptive cycle describes three problems organizations encounter when adjusting to their environment: an entrepreneurial problem focusing on the choice of product and market; the engineering problem involving the choice of technology for production and distribution; and the administrative problem concerning the choice of structure, process, and innovation. Miles and Snow (1978) advocated that organizations need to simultaneously solve these three problems to effectively adjust to their dynamic environment.

Each of the entrepreneurial, engineering, and administrative problems includes a set of alternative solutions (see Figure 1). Researchers Conant, Mokwa, and Varadarajan (1990) analyzed the three solutions to reveal eleven underlying dimensions in the Miles and Snow (1978) adaptive cycle. Solutions to the entrepreneurial problem

focus on product-market domain, success posture, surveillance, and growth. Alternative solutions to the product-market domain emphasize either stable, broad, both stable and broad or transient behaviors.

Insert Figure 1 about here

Solutions to the engineering problem involves technological goal, breadth, and buffers. Alternative solutions to the technological goal emphasize either cost control, flexibility, a mix of cost control and flexibility or guarding action behaviors.

Solutions to the administrative problems include dominant coalition, planning, structure, and control. Alternative solutions for administrative control emphasize either centralized, decentralized, matrix or transient behaviors. The different alternative behaviors within each set of solutions are used to determine the strategic type classifications (STCs) for organizations in an industry.

Strategic Typology

Miles and Snow's (1978) strategic typology describes four types of organizations: defenders (Ds), prospectors (Ps), analyzers (As), and reactors (Rs). Each STC represents a different organizational strategy for adapting to an industry. The defenders, prospectors, and analyzers

were interpreted as "pure" types of organizations by Miles, Snow, Meyer, and Coleman (1978, *p.* 550). Each one of these has a consistent pattern of adaptation for implementing its chosen organizational strategy, structure, and process. In contrast, reactors were explained as a type of strategic "failure" with inconsistent patterns of behavior for responding to its environment (Miles, Snow, Meyer & Coleman, 1978, *p.* 550).

Like Miles and Snow (1978), Mintzberg (1990) analyzed the reactors as a "catch-all" category for all kinds of ineffective behaviors (*p.* 215). Unlike Miles and Snow, Mintzberg viewed the strategic typology as a dichotomy of defenders and prospectors, with analyzers as a hybrid of the two. Likewise, Conant et al. (1990) described the analyzers as a hybrid given their unique combination of defender and prospector behaviors. In this study the researchers maintained the Miles and Snow perspective.

The defenders emphasized entrepreneurial stability by producing a narrow range of products. They achieved engineering efficiency via standardized cost controlled technologies. The centralized administrative control of defenders was dominated by finance and production personnel. In contrast, prospectors emphasized entrepreneurial innovation by producing a broad range of products. They utilized flexible engineering technologies for new product developments. The prospectors' administrative control was

decentralized to marketing and research and development (R&D) departments.

The analyzers emphasized entrepreneurial balance by simultaneously producing stable and innovative products. They focused on engineering efficiency via dual technologies for both cost control and flexible processing. An analyzer controls administrative planning staffs with a loose matrix of marketing, engineering, and production personnel.

In contrast, reactors emphasized transient entrepreneurial product-markets. They responded with guarded actions toward shifting technological goals and engineering processes. The reactors' administrative responses involved responding to immediate problems reported in the environment. Overall, the reactors represent an unstable type of organization. They represent a "residual failure" lacking consistent patterns of adaption for an effective organizational strategy, structure, and process (Miles & Snow, 1978, *p.* 550). Eventually, reactors must adopt one of the "pure" strategies of a defender, prospector, or analyzer to align with their environment.

Related Research

As previously stated, the Miles and Snow (1978) theoretical framework has been evaluated as one of the "best known" for spawning a literature of its own (Mintzberg, 1990, *p.* 186). The adaptive cycle and strategic typology

have clarified how patterned decision processes contribute to the effective alignment of an organization with its environment. Several research studies, including those by Porter (1980) and Miles and Snow, have consistently found that organizations with "pure" strategies perform better than do those firms whose strategies were "unstable" (*p.* 14). In an empirical study of Miles and Snow's strategic typology, Conant et al. (1990) found that the "pure" strategic types (Ds, Ps, and As) performed equally well and outperformed the "unstable" organizations (Rs). Also, the "pure" strategic types were reported to perceive their distinctive marketing competencies as significantly greater than "unstable" Rs in the American Health Maintenance Organization industry.

In the apparel industry, researchers Ko and Kincade (1993) found that Miles and Snow's (1978) strategic types were associated with the usage level of Quick Response (QR) technologies. Results indicated that apparel manufacturers (*N*=103) classified as Ps had a higher usage level of QR technologies. This finding confirmed that Ps emphasized new product developments and monitoring market demands.

Another apparel manufacturing study by Staples (1993) utilized the Miles and Snow (1978) strategic typology. A self-reporting measure with paragraph descriptions of the strategic types developed by Snow and Hrebiniak (1980) determined the classifications for 50 apparel manufacturers.

Results indicated that half of these manufacturers pursued a P strategy emphasizing new product development and marketing opportunities, while one third pursued a D strategy by emphasizing a low fashion change frequency for a stable niche in the marketplace.

A recent apparel retailing study by Conant, Smart, and Solano-Mendez (1993) extended the strategic typologies developed by Miles and Snow (1978) and Porter (1980). Conant et al. constructed a taxonomy of five generic retailing types: merchants, drifters, specialists, resisters, and stripers. The merchants emphasized a very broad strategy by offering product variety and depth. In contrast, the drifters lacked a consistent usage of inventory control and advertising. The specialists emphasized traditional fashions, merchandise presentation, and higher-priced lines. In contrast, the resisters emphasized a combination of drifter and specialist characteristics to sell traditional fashions; while not emphasizing lower-priced lines, inventory control, and targeted incentives. The stripers emphasized a "middle-of-the-road" strategy by offering moderate priced product lines (Conant, Smart & Solano-Mendez, 1993, *p.* 269).

Results from the apparel retailing study by Conant et al. (1993) indicated that merchants and specialists had the most clearly defined strategies. Both of these generic types emphasized a variety of marketing competencies and

better organizational performance comparisons than the others. The drifters, resisters, and stripers lacked emphasis and clarity regarding their organization's strategy. These related research references provide support for the theory, hypotheses, and methodology integrated in this study.

Research Hypotheses

The research hypotheses were formulated as follows:

H1. There are no significant differences among the observed and expected frequencies of the STCs (Ds=Ps=As=Rs) ($p<.05$).

H2. There are no significant differences among the observed and expected frequencies of the STCs (Ds=Ps=As=Rs) in relation to selected organizational characteristics ($p<.05$).

H3. There are no significant differences among the means of the STCs (Ds=Ps=As=Rs) in relation to selected organizational performance variables ($p<.05$).

Methodology

An Apparel Industry Survey (AIS) was developed to allow apparel manufacturers in the U.S. to express their views on organizational strategy and performance. The owners, presidents, or managers were asked to indicate the categorical alternatives that best described their

organizational strategy and the characteristics of their businesses. The manufacturers subjectively assessed their organizational performance relative to their competitors.

Instrument

The AIS was designed as a self-administered questionnaire in a booklet format. The self-reporting instrument included three sections entitled organizational characteristics, strategy, and performance.

The first section of the instrument included six items relating to organizational characteristics. These items were classification, total years in business, total number of employees, annual sales volume (optional), job title/position, and highest level of education.

Organizational strategy was measured using a reliable 11-item scale for operationalizing Miles and Snow's (1978) adaptive cycle and strategic typology. The 11-item scale was developed by Conant et al. (1990) to represent the eleven underlying dimensions in the adaptive cycle. Four categorical alternatives were described for each item/dimension to emphasize the adaptive behaviors of the strategic type classifications (STCs). The manufacturers were asked to indicate which alternative best described their organization's strategy. This was used to categorize the manufacturers into one of four STCs (Ds, Ps, As, and Rs). The test-retest reliability coefficients of the 11-

item scale ranged from 0.56 to 0.82, with a mean reliability of 0.69. This is slightly below the 0.70 value recommended by Nunnally (1978).

The final section of the AIS measured organizational performance using a three-item scale. These subjective items included profitability, return on investment (ROI), and overall firm performance. The manufacturers were asked to evaluate their organization's performance in comparison to other apparel manufacturers. A seven point Likert-type scale ranging from much worse (1) to much better (7) was used in this self-reporting section. As Conant et al. (1990) stated, subjective evaluations of organizational performance are fairly consistent with objective performance measures, as well as secondary published performance data (Dess & Robinson, 1984; Venkatraman & Ramanujam, 1986).

The self-administered questionnaire was pilot tested by nine owners, presidents, or managers representing a 16.07% response rate. The pilot study tabulation revealed that out of the 61 questionnaires mailed to a systematically selected sample of manufacturers, five were returned by the post office as undeliverable, resulting in 56 potential participants. It is common in the apparel industry for manufacturers to come and go quickly. Since the sample listing was received several months before the pilot study it is expected that these organizations closed or merged. Twelve completed questionnaires were returned by

participants. Among those, three were not included in the pilot study because they were not apparel manufacturers or they declined to participate. The nine completed questionnaires were analyzed for comments and suggestions to strengthen the AIS content validity. Minor revisions were made to the self-reporting questionnaire content and to the booklet format prior to administering the study.

Sampling

The AIS was mailed nationwide to a systematically selected sample of 1,634 manufacturers producing women's, misses', and junior's outerwear. A sample listing with 3,269 manufacturers was purchased from a direct marketing firm. The manufacturers were divided by employee size (small or large), then sorted geographically by state, and listed alphabetically with a SIC code of 2331, 2335, 2337 or 2339. Selected demographics included contact names and titles to improve the response rate.

A large sample size (N=1,634) was selected in an attempt to ensure an adequate number of responses for statistically analyzing the results. A review of mail survey literature indicated that generally a 50% response rate was acceptable (Dillman, 1978). However, response rates ranging from 20% to 50% were reported as common in the social sciences (Warde, 1983). The researchers were advised by a direct marketing firm to expect a 10% to 20% response

rate based on 1990 mail survey results from industry. Also, the low pilot study response rate of 16.07% guided the researchers to select as large a sample size as was economically feasible. To increase the probability for an acceptable response rate Dillman's (1978) total design method (TDM) was followed when conducting this study.

The response rate results revealed that out of the 1,634 questionnaires mailed, 562 were returned by the post office as undeliverable, resulting in 1,072 potential participants. It is expected that the transient nature of apparel manufacturers limited the number of potential participants (*e.g.* the business had closed, the contact person/position had changed, or no forwarding address was provided). Since the sample list was purchased several months before the three-wave mailing it is expected that these manufacturers had closed or merged. Two hundred eighteen (20.33%) questionnaires were returned by participants. Among these 67 were not included in the study due to missing data or because they declined to participate. A total of 151 usable questionnaires were obtained for analysis representing an adjusted response rate of 14.09%.

Due to a very low response rate, the sample was checked for generalizability by conducting a mail survey to non-respondents. The first page of the questionnaire, including only the organizational characteristics, were sent to 214 non-respondents in the sample. Thirty eight non-respondents

completed the six items relating to organizational characteristics, resulting in a 17.76% response rate. Those responses were tabulated for a chi square comparison of non-respondents and respondents on organizational characteristics (see Table 1).

The organizational characteristics of 38 non-respondents were compared to the 151 respondents (see Table 1). A chi-square analysis confirmed that the non-respondents were not significantly different from the respondents ($p<.05$). No significant differences were found between the non-respondents and respondents in relation to eight organizational characteristics (e.g., classification, SIC, total years in business, total number of employees, annual sales volume (optional), job title/position, highest level of education, and geographic region). Due to the similarity between the two samples on organizational characteristics the generalizability of results will probably not be limited.

Insert Table 1 about here

Procedure

Data collection procedures following Dillman's (1978) TDM resulted in a three-wave mailing. The initial mailing included an AIS instrument and postage-paid return envelope.

One week later a follow-up postcard was sent to all potential participants. Those manufacturers who had not responded two weeks after the postcard mailing were sent a follow-up AIS instrument and postage-paid return envelope. To improve the response rate first-class postage was hand stamped on each typed envelope and postcard. Other TDM procedures for dealing with the problem of non-response involved personalizing the cover letter and coding the AIS instrument color by SIC.

Analysis

Statistical analysis of the data included frequency distributions, chi square, and analysis of variance (ANOVA). Frequency counts were used to categorize the organizational strategy alternatives selected by the respondents into strategic type classifications (STCs) using a majority decision rule. Frequency distributions of the STCs and organizational characteristics of respondents were tabulated. In the analysis, chi square statistics were used to compare the differences between the STCs on eight organizational characteristics. One-way ANOVA statistics were used to examine whether significant differences existed between the STCs means on three organizational performance variables. If the ANOVA test was significant, multiple comparison procedures using pairwise *t* tests, equivalent to Fisher's least significant-difference (LSD) were used to

examine which strategic type classifications (STCs) means were significantly different from other STCs means.

Results

Sample

Most of the 151 organizations which participated in the study were apparel manufacturers (64.9%) as shown in Table 1. The others (35.1%) were classified as contractors (21.9%), subcontractors (4.6%), or a combination (8.6%). All of the organizations produced women's, misses', and junior's outerwear apparel products. Thirty (19.9%) manufactured blouses and shirts (SIC 2331), 19 (12.6%) produced dresses (SIC 2335), 24 (15.9%) manufactured suits and coats (SIC 2337), and 78 (51.7%) produced outerwear, not elsewhere classified (SIC 2339).

The majority (69.5%) of the organizations had been in business for 15 years or more (see Table 1). There were 84 (55.6%) small manufacturers (99 or fewer employees). In contrast, there were 67 (44.4%) large manufacturers (100 or more employees). For 70 (52.2%) organizations annual sales volume for the 1991 fiscal year was reported as less than $2.5 million. The other 64 (47.8%) organizations reported annual sales volumes of $2.5 million or more. Seventeen respondents did not report their organization's annual sales volume for the 1991 fiscal year. The analysis of annual sales volume was for only those 134 who reported that

information, since the item was indicated as optional on the questionnaire (see Table 1).

The job titles/positions of the respondents were identified in Table 1 as follows: Owner/President/Manager (106) and other (45). Respondents specified 24 other administrative positions. Ninety (59.6%) respondents were college graduates. Of these 50 (33.1%) had bachelor's degrees, 14 (9.3%) had some graduate work, and 26 (17.2%) had graduate degrees. The highest level of education of the other 61 (40.4%) respondents ranged from some high school to some four-year college.

The geographical locations of the respondents were divided into four regions as follows: Northeast (49 respondents), Midwest (18), South (57), and West (27) (see Table 1). Three regions had at least one state with 10 or more respondents. In the Northeast, New York had 23 (15.3%) respondents and Pennsylvania had 14 (9.3%) respondents. In the South, 10 (6.6%) respondents were from North Carolina; and in the West, 19 (12.4%) respondents were from California. In general, the Northeast and South represent regions with a large number of established manufacturers; whereas, the West Coast is a growing region for apparel manufacturing (Foxenberger, 1994; Moore, 1994).

Strategic Type Classifications

The Conant et al. (1990) 11-item scale was used to determine the strategic type classifications (STCs) for organizations participating in this study. Frequency counts were performed to categorize 151 organizations into four STCs. The manufacturers indicated which strategic type alternative best described their organization's strategy. This was used to classify each organization as a defender (D), prospector (P), analyzer (A) or reactor (R) (Conant, Mokwa & Varadarajan, 1990). If a majority decision rule resulted in a tie between selected D, P, and A alternatives, then the organization was classified as A. In case a tie involved an equal set of selected R alternatives, then the organization was classified as R. This majority decision rule was based on the classification procedure used by Conant et al. (1990).

Data analysis resulted in the following distribution of STCs: 66 (43.7%) Ds, 18 (11.9%) Ps, 36 (23.8%) As, and 31 (20.5%) Rs (see Table 2). The majority decision rule involving 29 (19.2%) ties was applied to classify 16 (10.6%) organizations as analyzers and 13 (8.6%) organizations as reactors. Of these the most frequent ties were between selected D and A alternatives which resulted in eight (5.3%) organizations being classified as analyzers, followed by a combination of D and P ties that resulted in four (2.7%) more organizations being classified as analyzers. The ties

between D, P, and A were classified as analyzers (Conant, Mokwa & Varadarajan, 1990).

Insert Table 2 about here

Organizational Characteristics

Chi square statistics were used to compare the differences between the STCs on eight organizational characteristics shown in Table 2. A chi square test indicated that the nominal STCs for the 151 organizations in the sample were significantly different ($p<.001$). The researchers rejected null hypothesis H1. This finding indicating that significant differences exist between the observed and expected frequencies of the Ds, Ps, As, and Rs confirmed Miles and Snow's (1978) strategic typology.

The chi square test results indicated significant differences between the STCs in relation to the total years the organizations had been in business, whether for less than or equal to 14 years or for more than or equal to 15 years ($p<.001$). A chi square comparison of STCs and total years in business indicated significantly different results among the Ds, Ps, As, and Rs with more than or equal to 15 years in business ($p<.001$). Thus the researchers rejected null hypothesis H2 and concluded that there were significant differences among the STCs in relation to total years in

business. No significant differences were found among the observed and expected frequencies of the STCs in relation to the seven other organizational characteristics.

Organizational Performance

A self-reporting multi-item measure was used to determine whether there were significant differences between the STCs means on three organizational performance variables. In the analysis, the four STCs (Ds, Ps, As, and Rs) were treated as the independent variable. A one-way ANOVA was performed on each of the dependent organizational performance variables: profitability, ROI, and overall firm performance. One of the three ANOVA tests, overall firm performance, was significant ($p<.05$) as noted in Table 3. The null hypothesis H3 was rejected since there was at least one significant difference among the means of the STCs on overall firm performance.

Insert Table 3 about here

A multiple comparison procedure followed to determine which STCs means were significantly different from other STCs means. The Fisher's LSD comparison tests were used to examine differences among the D, P, A, and R means on overall firm performance. Two pairwise *t* tests were significant ($p<.05$) for the following combination of means:

P and R; P and D (see Table 3). For the P and R comparison of means, the Ps (*M*=5.89) perception of overall firm performance was slightly to moderately better than the Rs (*M*=4.94; P>R). Likewise, the Ps (*M*=5.89) perception of their organization's overall firm performance was slightly to moderately better than the Ds (*M*=4.82; P>D). In the P and D comparison, the difference between means (1.07) was greater than the P and R difference between means (0.95).

Theoretically, this result was not expected because Ps and Ds represent "pure" organizations which are likely to perform equally well. The Rs represent "unstable" organizations which are expected to perform worse than "pure" STCs due to their inconsistent patterns of adaptation (Miles & Snow, 1978, *p*. 550). Empirically, several research studies have confirmed that the "pure" strategic types (Ds, Ps, and As) perceived their overall firm performance as neither worse or better than other "pure" organizations. This is in contrast to the Rs, who perceived their overall firm performance as worse than other organizations (Conant et al., 1990; Snow & Hrebiniak, 1980).

Discussion

Analysis of consistent organizational strategy items selected by respondents within each STC confirmed Miles and Snow's (1978) adaptive cycle and strategic typology. Brief descriptions of the most frequently selected strategic type

alternatives is shown in Figure 2. This illustrates the differences among the four STCs in their perceptions of organizational strategy. The most frequently selected D, P, A, and R alternatives within each STC were compared to describe the apparel manufacturers studied (see Figure 2).

Insert Figure 2 about here

Among the respondents classified as Ds, nine of the 11 multi-scale items selected to best describe their organization's strategy were D alternatives (see Figure 1). The majority of Ds were divided between D and A alternatives on the other two items: entrepreneurial surveillance and engineering technological goal. Of the 66 Ds, at least 34 consistently selected D alternatives. A summary of the Ds most frequently selected D alternatives resulted in the strategic type description presented in Figure 2.

Likewise, among the Ps, nine of the 11 scale items consistently selected were P alternatives. A majority of the Ps were divided three ways between D, P, and A alternatives on two scale items: entrepreneurial growth and administrative dominant coalition (see Figure 1). Analysis of the most consistently selected organizational strategy alternatives by the 18 Ps resulted in the Figure 2 description.

In contrast, among the As, only three of the 11 multi-scale items selected to best describe their organization's strategy were A alternatives. These items were: entrepreneurial surveillance, entrepreneurial growth, and engineering technological goal (see Figure 1). On eight of the 11 items, a majority of As were most often divided three ways between D, P, and A alternatives. Theoretically, a division between the "pure" alternatives was expected since As adopt a combination of D and P strategic behaviors. A frequency count of the most often selected alternatives by the 36 As resulted in the description for Figure 2.

Similarly, among the respondents classified as Rs, R alternatives were consistently selected for only three scale items: engineering technological buffers, administrative dominant coalition, and administrative structure (see Figure 1). For the other eight organizational strategy items, a majority of the Rs were inconsistently divided between D, P, and A alternatives. Theoretically, the lack of consistent R alternatives was expected because Rs respond to their environment with unstable strategic behaviors. Analysis of the most often selected alternatives by the 31 Rs resulted in the strategic type description for Figure 2.

Based on the high frequency of consistent strategic type alternatives (81.8%) selected by the respondents classified as Ds and Ps the 11-item scale was subjectively evaluated as an acceptable measure of organizational

strategy. However, the disproportionately large number of inconsistent strategic type alternatives (72.7%) selected by the respondents classified as As and Rs challenges the researchers subjective evaluation of the instrument. The frequency with which certain strategic type alternatives were chosen in this study were compared to the findings in Conant et al. (1990). One similarity was found between the studies in relation to the frequency distribution of strategic type alternatives reported by the respondents on entrepreneurial product market domain. The comparisons between the two studies was limited, since the analysis of consistent strategic type alternatives selected by the respondents within each STC was excluded from the research findings in Conant et al.

A further examination of the As and Rs responses might indicate that problems exist in the wording and/or use of these alternatives for the purpose of measuring organizational strategy. Specifically, the reliability of the 11-item scale should have been included in the analysis of the instrument given the nominal level of measurement. It would be expected that both the classification procedures and test-retest reliability coefficients reported by Conant et al. lends support to the face validity of this newly developed scale as a good measurement of each STC.

Significant differences among the STCs in their perceptions of overall firm performance were evident from

the ANOVA and Fisher's LSD results. The Ps perceived their overall firm performance as slightly to moderately better than Rs and Ds (Ps>Rs, Ps>Ds). This result challenged both the theoretical framework and related research cited in this study. Theoretically, the significant difference between Ps and Rs on overall firm performance was expected because of their distinct patterns of adaptation. However, the definite differences between Ps and Ds on overall firm performance was not expected because of their consistent patterns of adaptation. Empirically, these "pure" strategic types were expected to perform equally well according to Miles and Snow's (1978) adaptive cycle and strategic typology and the research of Conant et al. (1990; 1993).

Conclusions and Implications

Descriptions of the apparel manufacturers' views on organizational strategy in this study supported the Miles and Snow (1978) adaptive cycle and strategic typology. The largest strategic type, D consistently emphasized engineering solutions to control costs for producing stable products and penetrating existing markets. This contrasts with the Ps, who frequently emphasized entrepreneurial behaviors to continuously monitor market trends for developing new product and market opportunities. The As emphasized a combination of entrepreneurial and engineering alternatives to penetrate stable product-markets while

developing newer product-markets in comparison to the Rs, who lacked consistent entrepreneurial, engineering, and administrative solutions to their problems. These organizational strategy descriptions consistently emphasized solutions which confirmed Miles and Snow's strategic typology for adapting to the dynamic environment in an industry.

The mean performance data related to these 151 respondents suggests an industry with organizations that perceived their overall firm performance as slightly better than other apparel manufacturers. Eighteen respondents classified as Ps perceived their overall firm performance as moderately better than other apparel manufacturers. The ANOVA results indicated a significant difference between P and R, and between P and D. Both the 31 Rs and 66 Ds perceived their overall firm performance as slightly better than other apparel manufacturers. These performance results were limited in generalizability due to the subjective self-reporting measures from a nationwide sample of SIC 2300 manufacturers.

An implication for apparel manufacturers is that their organization's strategy should be perceived as the choice of the strategic type in which to compete. Apparel manufacturers committed to "pure" strategies are likely to perform equally well within an industry in contrast to R organizations, whose "unstable" strategies are likely to

perform worse than other apparel manufacturers. Reactive manufacturers should move toward one of the three "pure" strategies to profitably compete when producing women's, misses', and junior's outerwear in the U.S. These implications are important for apparel manufacturers because strategic choices and adaptive behaviors will become more difficult to implement in the emerging environment.

For educators, this involves teaching organizational strategy, structure, and process, as well as preparing students to think strategically and solve problems by analyzing case studies. Faculty can use case studies to synthesize alternative strategic type behaviors for adapting to a competitive environment. In this way apparel graduates will be more capable of formulating and implementing an organizational strategy when employed by a manufacturer in a managerial position.

The implication for researchers is to extend the study of apparel manufacturers' perceptions on organizational strategy and performance. A research study focusing on specific strategic type behaviors within the apparel industry could be beneficial. For this study reliable multi-item scales and STC categorization procedures from unrelated industries were applied for pioneering research with apparel manufacturers in the U.S. In this slow-growth, very competitive environment, industry specific strategic behavior instruments will be critical to measure

the new and more effective strategies of apparel manufacturers. Researchers must develop new STCs to categorize the emerging organizational strategies, structures, and processes in apparel manufacturing. In the 21st century organizational strategy will be viewed by new administrators and apparel graduates in very different ways. As the 21st century approaches apparel manufacturers planning to outperform other organizations must adopt new "pure" strategies to compete in a changing environment.

Problems	Solutions	Behaviors	Types
Entrepreneurial	Product-Market Domain	Stable	Defender
		Broad	Prospector
Choice of		Stable and Broad	Analyzer
Product-Market		Transient	Reactor
	Success Posture	Selective	Defender
		Innovative	Prospector
		Selective and Innovative	Analyzer
		Responsive	Reactor
	Surveillance	Minimal	Defender
		Lengthy	Prospector
		Average	Analyzer
		Sporadic	Reactor
	Growth	Market Penetration	Defender
		Product-Market Development	Prospector
		Penetration and Development	Analyzer
		Market Pressure	Reactor
Engineering	Technological Goal	Cost Control	Defender
		Flexible	Prospector
Choice of		Cost Control and Flexible	Analyzer
Technologies		Guarding Action	Reactor
for			
Production	Technological Breadth	Specialized	Defender
and		Broad and Entrepreneurial	Prospector
Distribution		Analytical	Analyzer
		Fluid	Reactor
	Technological Buffers	Limited	Defender
		New	Prospector
		Proven	Analyzer
		Responsive	Reactor
Administrative	Dominant Coalition	Financial and Production	Defender
		Marketing, Research and Development	Prospector
Choice of		Marketing, Engineering, and Production	Analyzer
Structure,		Functional	Reactor
Processes, and			
Innovation	Planning	Maintenance	Defender
		Development	Prospector
		Maintenance and Development	Analyzer
		Challenges	Reactor
	Structure	Functional	Defender
		Product-Market	Prospector
		Functional and Product-Market	Analyzer
		Changeable	Reactor
	Control	Centralized	Defender
		Decentralized	Prospector
		Centralized and Decentralized	Analyzer
		Reporting	Reactor

Figure 1. The adaptive cycle and strategic typology.

Source:Conant, J. S., Mokwa, M. P., & Varadarajan, P. R. (1990). Strategic types, distinctive marketing competencies and organizational performance: A multiple measures-based study. *Strategic Management Journal, 11*(5), 364-383.

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Table 1. Chi square results for comparison of non-respondents and respondents on organizational characteristics.

Variables	Non-Respondents (*N*=38) *f*	%	Respondents (*N*=151) *f*	%	*df*	X^2	*p*
Classification							
Apparel Manufacturer	21	55.3	98	64.9	1	1.21	0.27
Contractor, Subcontractor and Other	17	44.7	53	35.1			
Standard Industrial Classification							
2331	8	21.1	30	19.9	3	5.06	0.17
2335	9	23.7	19	12.6			
2337	2	5.3	24	15.9			
2339	19	50.0	78	51.7			
Total Years in Business							
≤ 14 Years	12	31.6	46	30.5	1	0.02	0.89
≥ 15 Years	26	68.4	105	69.5			
Total Number of Employees							
≤ 99 Employees	23	60.5	84	55.6	1	0.30	0.59
≥ 100 Employees	15	39.5	67	44.4			
Annual Sales Volume (Optional)[a]							
≤ $2,499,999 Million	24	63.2	70	52.2	1	1.42	0.26
≥ $2.5 Million	14	36.8	64	47.8			
Job Title/Position							
Owner/President/Manager	25	65.8	106	70.2	1	0.28	0.60
Other	13	34.2	45	29.8			
Highest Level of Education							
≤ Some Four-Year College	17	44.7	61	40.4	1	0.24	0.63
≥ Bachelor's Degree	21	55.2	90	59.6			
Geographic Region							
Northeast	15	39.5	49	32.5	3	1.98	0.58
Midwest	2	5.3	18	11.9			
South	13	34.2	57	37.8			
West	8	21.1	27	17.8			

Note. Column percentages for each variable total 100.0 and no chi squares were significantly different ($p<.05$).
[a]Frequency missing values of respondents on annual sales volume (optional) equaled 17.

Table 2. Chi square results for comparison of strategic type classifications and organizational characteristics of respondents (*N*=151).

Variables	Strategic Type Classifications[a] D (*n*=66) *f*	%	P (*n*=18) *f*	%	A (*n*=36) *f*	%	R (*n*=31) *f*	%	*df*	x^2	*p*[b]
Strategic Type Classifications	66	43.7	18	11.9	36	23.8	31	20.5	3	32.76	0.001
Classification											
Apparel Manufacturer	45	68.2	14	77.8	24	66.7	15	48.4	3	5.38	0.146
Contractor, Subcontractor and Other	21	31.8	4	22.2	12	33.3	16	51.6			
Standard Industrial Classification											
2231	15	22.7	3	16.7	6	16.7	6	19.4	9	11.97	0.214
2335	12	18.2	1	5.6	5	13.9	1	3.2			
2337	10	15.2	1	5.6	9	25.0	4	12.9			
2339	29	43.9	13	72.2	16	44.4	20	64.5			
Total Years in Business											
≤ 14 Years	13	19.7	9	50.0	7	19.4	17	54.8	3	17.61	0.001
≥ 15 Years	53	80.3	9	50.0	29	80.6	14	45.2			
Total Number of Employees											
≤ 99 Employees	39	59.1	8	44.4	17	47.2	20	64.5	3	3.26	0.354
≥ 100 Employees	27	40.9	10	55.6	19	52.8	11	35.5			
Annual Sales Volume (Optional)[c]											
≤ $2,499,999 Million	34	58.6	6	35.3	13	39.4	17	65.4	3	6.89	0.076
≥ $2.5 Million	24	41.4	11	64.7	20	60.6	9	34.6			
Job Title/Position											
Owner/President/Manager	41	62.1	14	77.8	24	66.7	27	87.1	3	7.00	0.072
Other	25	37.9	4	22.2	12	33.3	4	12.9			
Highest Level of Education											
≤ Some Four-Year College	24	36.4	3	16.7	18	50.0	16	51.6	3	7.65	0.054
≥ Bachelor's Degree	42	63.6	15	83.3	18	50.0	15	48.4			
Region											
Northeast	22	33.3	4	22.2	16	44.4	7	22.6	9	16.32	0.061
Midwest	6	9.1	3	16.7	7	19.4	2	6.5			
South	24	36.4	5	27.8	10	27.8	18	58.1			
West	14	21.2	6	33.3	3	8.3	4	12.9			

Note. Column percentages for each variable total 100.0.
[a]D=Defender, P=Prospector, A=Analyzer, and R=Reactor.
[b]Chi squares for strategic type classifications and total years in business were significantly different ($p<.001$).
[c]Frequency missing values for annual sales volume (optional) equaled 17.

Table 3. Results for analysis of variance between strategic type classifications on respondents' perceptions of organizational performance (N=151, df=3,147).

Variables	*M* Strategic Type Classifications[a] D (n=66)	P (n=18)	A (n=36)	R (n=31)	F	p[b]	Fisher's LSD
Profitability	4.53	5.00	4.89	4.29	1.59	0.194	-
Return on Investment	4.38	5.28	4.86	4.32	2.51	0.061	-
Overall Firm Performance	4.82	5.89	5.31	4.94	3.63	0.014	P>R; P>D

Note. The mean values for each variable ranged between 1.00 and 7.00.
[a]D=Defender, P=Prospector, A=Analyzer and R=Reactor.
[b]Analysis of variance between strategic type classifications on respondents' perceptions of overall firm performance were significantly different (p<.05).

Strategic Type Classifications	Description
Defender (*n*=66)	Emphasized entrepreneurial stability by producing a narrow range of high quality products to penetrate existing markets. They reported engineering efficiency via specialized skills coupled with standardized technologies to control costs in a limited number of production and distribution areas. Their administrative control was highly centralized and functional in structure to maintain a financially secure product-market position through quality control processes.
Prospector (*n*=18)	Emphasized entrepreneurial innovation by producing a broad product line and continuously monitoring market trends. They reported diversified skills and flexible engineering technologies for developing new products and markets. Their administrative control was decentralized and product-market structured for the creation of products new to the industry or for expansion into new market segments.
Analyzer (*n*=36)	Emphasized entrepreneurial balance by simultaneously producing a stable product line to penetrate existing markets and adopting new products only after monitoring their proven market potential. They reported engineering flexibility by selecting dual technologies to control costs for developing new products or markets. Their administrative control was centralized for stable product-markets and decentralized in newer product-markets to maintain a secure financial position while analyzing new marketing, engineering, and production opportunities.
Reactor (*n*=31)	Emphasized entrepreneurial growth by producing a transitional product line to maintain or enhance their market position. They reported engineering buffers with fluid skills for developing new products and markets while guarding against high technological risks. Their administrative control procedures involved reporting immediate problems and solutions to functional departments within the continually changing organizational structure.

Figure 2. Description of strategic type classifications (*N*=151).

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CHAPTER V

DISCUSSION, SUMMARY, AND RECOMMENDATIONS

This chapter includes a discussion of the research findings related to the study which are of broader scope than those reported in Chapter IV. These findings focus on whether the strategic type (organizational strategy) classifications of selected apparel manufacturers vary in relation to competitive methods emphasized. The supplementary results and discussion are related to apparel manufacturers' perceptions of organizational strategy and performance. In addition, a brief summary of the characteristics of competition in the apparel industry are presented in this chapter. Also, results that have clear implications for the apparel industry and recommendations for further research in the area of apparel manufacturing are included. Thus, the chapter is organized in three sections: discussion, summary of competition in the apparel industry, and recommendations for future study.

Discussion

The majority of the results and findings of the study are discussed in Chapter IV. However, the analysis of apparel manufacturers' perceptions on competitive methods are not included in Chapter IV. The hypothesis H4, there are no significant differences among the means of the strategic type classifications (STCs) in relation to selected competitive methods, will be discussed in this section.

In the analysis, the four STCs (Ds, Ps, As, and Rs) were treated as the independent variable. A one-way analysis of variance (ANOVA) was performed on each of the 26 dependent competitive methods variables. Eight of the 26 ANOVA tests were significant ($p<.05$) as noted in Table 11. (See Appendix G.) The null hypothesis H4 was rejected since there was at least one significant difference among the STCs means on the following competitive methods: product range, product development, advertising and promotion, brand identification, channels of distribution, number of customers, market segment(s), and number of channels.

A multiple comparison procedure followed to determine which STCs means were significantly different from other STCs means. (See Appendix G.) The Fisher's least significant-difference (LSD) tests were used to examine differences among the D, P, A, and R means on the eight significant competitive methods. Five pairwise *t* tests were

significant ($p<.001$) for the following combinations of means in relation to product development: D and R; D and A; D and P; R and P; and A and P (see Table 11).

The Ds ($M=3.33$) emphasized a slightly higher maintenance of current products than the other STCs, Rs ($M=2.81$; D>R), As ($M=2.64$; D>A), and Ps ($M=1.67$; D>P). (See Appendix G.) For the D and P comparison of means, the results indicated significant differences among the Ds ($M=3.33$) slightly higher emphasis on maintaining current products; while the Ps strongly emphasized continued new product development ($M=1.67$). Likewise, in the R and P comparison, the Rs ($M=2.81$) slightly emphasized continued new product development; whereas, the Ps ($M=1.67$) strongly emphasized product development (R>P). Similarly, the As ($M=2.64$) emphasis on continued new product development was slightly less than the Ps ($M=1.67$; A>P). (See Appendix G.)

Theoretically, this result was expected because Ds consistently emphasized engineering solutions to control costs for producing stable products. This contrasts with the Ps, who frequently emphasized entrepreneurial behaviors for developing new product market opportunities. The As emphasized a combination of entrepreneurial and engineering alternatives to penetrate stable product-markets while developing newer product-markets using many channels of distribution. In comparison to the Rs, who lacked consistent entrepreneurial, engineering, and administrative

solutions in response to the high fashion change frequency in apparel manufacturing (Miles & Snow, 1978).

In addition, three Fisher's LSD tests indicated significant differences ($p<.05$) for the following combinations of means on six competitive methods: P and D; R and D; and A and D. The six competitive methods were product range, brand identification, channels of distribution, number of customers, market segment(s), and number of channels. The findings indicated that the means of the Ps, Rs, and As were significantly different from the means of the Ds on competitive methods associated with marketing, promotion, and assortment (P>D; R>D; A>D).

For example, the Ps slightly emphasized developing brand name recognition (M=4.06) and many channels of distribution (M=4.00). (See Appendix G.) In comparison, Ds slightly emphasized providing a narrow range of products (M=2.41), a limited development of brand identification (M=2.65), selling products to one market segment (M=2.68), and a single channel of distribution (M=2.82; P>D).

Again, these results were expected since in this study the researchers maintained the Miles and Snow (1978) perspective. The Ds emphasized entrepreneurial stability and engineering buffers by producing a narrow product line for distribution to a few market segments. In contrast, Ps emphasized entrepreneurial growth and engineering buffers by developing brand identification for distribution through

many channels. Similarly, Mintzberg (1990) viewed Miles and Snow's strategic typology as a dichotomy of Ds and Ps, with As being a hybrid of the two given their slight emphasis on both new product development and minimal advertising and promotion expense. In comparison, Rs were viewed as transient manufacturers in relation to the competitive methods emphasized for adapting to the changing marketing, promotion, and assortment trends in the apparel industry.

In the analysis, another combination of five STCs means were significantly different in relation to the channels of distribution and the number of customers emphasized (see Table 11). Results from the multiple comparison procedures indicated there were significant differences ($p<.01$) between the following combinations of means: P and R; P and A; P and D; R and D; and A and D. The Ps ($M=4.28$) slightly emphasized developing new channels of distribution; while the Ds ($M=2.79$) slightly emphasized using only existing channels of distribution (P>D). In comparison, both the As ($M=3.50$) and Rs ($M=3.48$) neither emphasized existing or new channels of distribution (P>D; P>A).

Similar results found the Ps ($M=4.06$) slightly emphasized a large number of customers; while the Ds ($M=2.48$) slightly emphasized a small number of customers (P>D). (See Appendix G.) In contrast, both the Rs ($M=3.23$) and As ($M=3.17$) neither emphasized a small or large number of customers (R>D; A>D).

In addition, Ps (*M*=2.78) slightly emphasized a minimal level of advertising and promotion expense; while both the Ds (*M*=1.94) and Rs (*M*=1.94) strongly emphasized a minimal advertising and promotion expense. Theoretically, this result was expected because Ps represent "pure" organizations which are likely to compete by using extreme methods (*e.g.*, developing brand identification for a large number of customers via a moderate level of advertising and promotion expense); whereas, Ds focus on low costs and Rs represent "unstable" organizations which are expected to compete by emphasizing inconsistent and/or incompatible methods (*e.g.*, reaching a moderate number of customers via minimal advertising and promotion expenses).

Summary of Competition in the Apparel Industry

Apparel manufacturing has been characterized as the most labor-intensive and most fragmented sector in the apparel industry. Ten years ago, more than 15,000 apparel manufacturers operated 26,505 plants in the U.S. (McCrary, 1994). Now the number of apparel plants has declined by 14%, from 26,505 to 22,872. Traditionally, the apparel industry has been comprised of many small manufacturers, employing 49 or fewer workers. Today the apparel industry continues to be dominated by small, specialized manufacturers which are frequently under contract with a large, diversified manufacturer or a retailer. In addition,

a relatively small percentage of the U.S. apparel manufacturers have reported sales over $100 million per year (Kurt Salmon Associates, 1994).

Of the segments in the apparel industry, manufacturers have the lowest entry barriers in terms of capital and technological knowledge requirements, ready access to production processes, and broad availability of raw materials (Dickerson & Dalecki, 1991). The ease of entry also contributes to the small size and the rather high failure rate of apparel manufacturers. Typically, the apparel industry has been a creative, price-competitive environment, with a large number of independently owned manufacturers and contractors operating with limited equipment and expertise to produce narrow product lines or unique products (Dickerson, Dalecki, & Meyer, 1991). In contrast, the large apparel manufacturers produce a broader assortment of products by utilizing automation and technology to improve productivity.

Competition is intense both among domestic manufacturers and foreign producers. Intense competition has been reflected in the acceleration of fashion change, increase in global competition, decrease in labor force, dissatisfaction of retailers, and availability of new technology (Kincade & Cassill, 1993). For example, when U.S. manufacturers experienced intensified competition from low-cost imports, they choose to compete by subcontracting

assembly operations to developing countries, integrating production operations across national boundaries, and adopting Quick Response (QR) technologies (Esquivel, 1994; Webb, 1994). These changes suggest that the revitalization and downsizing of the U.S. apparel industry is needed to adjust to some of the challenges in manufacturing.

Kurt Salmon Associates (1994) recommended that apparel manufacturers develop and enact adaptive competitive strategies to optimize sales, to increase productivity, and to increase profitability. Many manufacturers in the U.S. are entering new market segments by selling products of national interest to ethnic groups to increase profits. In addition, exporting products to new global markets will increase international growth in sales and profits, extend the demand for seasonal items, and improve year-round production runs (Jacobs, 1994). The adoption of QR as a management system provides a win/win strategy for textile and apparel manufacturers, retailers, and consumers. Communication and partnership between manufacturers and retailers is key to distributing the ordered goods to the customers with a minimum lead time (AAMA, 1987).

To be responsive to the changing competitive environment in the mature U.S. apparel industry, many large manufacturers are adapting a direct retail strategy to distribute products through a combination of specialty regular-price retailers and outlet stores (Esquivel, 1994).

The implementation of these adaptive competitive strategies for apparel manufacturers will be slow, but effective in meeting the demands of the emerging industry environment (Kincade & Cassill, 1993). Although competition has been intense for apparel manufacturers the technological advances in production, marketing, and distribution have made the U.S. apparel industry a more viable one.

The fragmented nature of the apparel industry will continue to challenge the strategic thinking of owners, presidents, and managers in both small and large-sized organizations. Porter (1980) articulated three generic strategies for competing in a fragmented industry with many small organizations, in which none of them has a significant share of the market, and where the high frequency of styling changes affects the production cycles. *Low-cost* emphasizes basic products at lower prices; *differentiation* features specialty items at higher prices; and *focus* emphasizes a specific group of products, customers or geographic markets.

In the present study the competitive methods of apparel manufacturers producing women's, misses' and junior's outerwear in the U.S. were analyzed. The descriptive profile from the organizational characteristics data related to these domestic apparel producers suggests a fragmented industry with primarily small organizations. Forty-four percent of these apparel manufacturers described their organization's strategy as defending a stable niche in the

marketplace. In addition, twelve percent of the apparel manufacturers focused on identifying new products and market opportunities. Twenty-four percent of the apparel manufacturers produced a combination of stable and newer products to minimize their risks while maximizing their profits, while 21% of these apparel manufacturers perceived their organization's strategy as reactive. In a fragmented industry with high fashion change frequency, these manufacturers of women's apparel are likely to compete by quickly copying and producing the most popular styles.

Nearly 65% of the respondents described their organization's classification as apparel manufacturer, while a quarter indicated a contractor or subcontractor classification. In recent decades, the use of contractors has grown in relation to manufacturing. Contractors are independent producers who perform cutting or sewing operations for apparel manufacturers and increasingly for retailers with private label programs. Manufacturers perform all their own operations from the initial designs to distribution. For example, in women's, misses', and junior's outerwear categories, the number of manufacturers declined by 35% in the 1980s; whereas, the number of contractors increased by 26% (Dickerson & Dalecki, 1991).

Most of the respondents manufactured women's outerwear not elsewhere classified (SIC 2339), such as activewear, sportswear, and service apparel. During the 1990s, the

sales of women's outerwear not elsewhere classified has increased, since the casualization of the workplace and uniformization of the service industry have been major trends affecting the marketplace. At the same time, sales for apparel have declined because consumer spending on automobiles, housing, and other home related products has steadily increased. This shift in consumer spending has affected the production cycles and profit performances of apparel manufacturers for women's wear.

The high percentage of respondents with 99 or fewer employees in the target population suggests that the results can be relied upon to represent the total population of apparel manufacturers in women's outerwear. As such, the apparel industry continues to be comprised of many small manufacturers with annual sales of less than $2.5 million. In contrast, 75% of the large manufacturers in this study reported annual sales volumes of $2.5 million or more for the 1991 fiscal year. One hundred five (70%) respondents indicated their organization had been in business for 15 years or more; while 45 (30%) others indicated between five and 14 years. The very high percentage of apparel manufacturers, contractors, and subcontractors who were in business for 15 years or more suggests that the established organizations developed successful adaptive competitive strategies to survive the intensified competition from low-cost imports and the weak economy of the past few years.

Thirty-four states were represented among the 151 respondents. Seventy percent of the respondents described their organization's location as in the Northeast or South; while 30% were in the Midwest and Western regions. In general, the Northeast and South represent regions with a large number of established manufacturers; whereas, the West Coast is a growing region in apparel manufacturing for new organizations producing activewear and sportswear. Recently a trade publication, *Apparel Industry Magazine,* reported that domestic apparel manufacturers on the West Coast and in the South were managing a comeback by focusing on product diversity, special market needs, information technology systems, and quick turn-arounds (Foxenberger, 1994; Moore, 1994). Both of these regions were experiencing positive growth in apparel, since the manufacturers and contractors adopted different competitive methods to offer several support services, such as in-house screen printing, smaller orders, and more frequent shipments to retailers.

Currently the competitive methods emphasized among apparel manufacturers represent a combination of different techniques because of the fragmented industry conditions that exist in the dynamic marketplace. For example, as apparel manufacturers have placed added emphasis on defending a stable niche, the respondents' mean scores on product development and market segment(s) suggest that these organizations emphasized a slightly higher maintenance of

current products and a single channel of distribution in comparison to other apparel manufacturers. In contrast, as apparel manufacturers focused on identifying and utilizing new product-markets, the respondents strongly emphasized continued new product development, while slightly emphasizing many channels of distribution. The apparel manufacturers offering a combination of stable and newer products slightly emphasized product development and new channels of distribution. The reactive apparel manufacturers' mean scores on product development and market segment(s) were significantly different compared to the other producers who were defending a stable niche or prospecting new product-markets.

The issues addressed in this study were limited to the organizational strategy alternatives and competitive method items developed by two different teams of researchers in strategic management (Conant, Mokwa, & Varadarajan, 1990; McDougall & Robinson, 1990). It would be helpful if, in addition to the frequency of styling changes, a measure to classify the organization's percentage of production and distribution both domestically and globally was added.

Recommendations for Future Study

The findings from the present study provided a basis from which the researcher proposes the following recommendations for further research.

1. The organizational strategy, competitive methods, and organizational performance variables are fairly new to research in apparel manufacturing and need further study.

2. The organizational characteristics are important for interpreting the descriptive statistics of the sample. Future sample sizes should be as large as possible to ensure that the organizational characteristics have alternative categories with five or more frequency counts for a valid application of chi square statistic tests (*e.g.*, to analyze differences between the strategic type classifications in relation to number of employees and annual sales volume). Also, the current data set could be analyzed for comparisons of apparel manufacturers and contractors on organizational characteristics, organizational strategy, competitive methods and organizational performance.

3. The organizational strategy instrument in the current study could be expanded to operationalize specific strategic type behaviors within the apparel industry (*e.g.*, adoption of Quick Response (QR) strategies for commodity and specialty items). Collecting data concerning industry specific strategic behaviors would provide a quantitative approach for describing, measuring, analyzing, and comparing organizational strategy; for example, how organizational strategy applies to apparel manufacturers in terms of the length of time needed for producing basic and fashion items.

4. The competitive methods instrument is in need of further development to measure multiple dimensions of each method (*e.g.*, producing fashionable items/producing functional items). Refining the competitive method items could improve the face validity, instrument reliability, and knowledge of strategies relevant to an industry. For example, expanding the competitive method items to include the choice of production system used by a manufacturer to fit its product-market domain (*e.g.*, using bundle production systems/developing modular production systems and serving domestic markets/serving global markets).

5. The organizational performance instrument in the current study could be expanded to include other variables that contribute to the collection of sensitive data (*e.g.*, growth in employment, growth in sales by product types, growth in revenue, and effectiveness of cost control systems). For example, one variable might be the usage of inventory control systems to analyze the demand for basic and fashion items before production and distribution technologies are implemented.

6. The dissemination of implications for researchers, educators, and manufacturers could be expanded through trade publications or university programs (*e.g.*, articles and sourcing fairs to communicate new strategies for apparel manufacturers to profitably compete in the new millennium).

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APPENDIXES

APPENDIX A

QUESTIONNAIRE

APPAREL INDUSTRY SURVEY

ORGANIZATIONAL CHARACTERISTICS

For each item, please circle (O) the alternative that best describes your organization.

1. **Indicate your organization's classification.** *(Circle one alternative)*

   a Apparel Manufacturer
   b Contractor
   c Subcontractor
   d Other Please Specify _____

2. **Indicate the total years your organization has been in business.**

   a Less than 1 Year
   b 1-4 Years
   c 5-9 Years
   d 10-14 Years
   e More than 15 Years Please Specify ____

3. **Indicate the total number of employees in your organization.**

   a Under 5
   b 5-9
   c 10-24
   d 50-99
   e 100-249
   f 250-499
   g 500-999
   h 1,000-2,499
   i Over 2,500 Please Specify _____

4. **OPTIONAL: Indicate your annual sales volume for the past fiscal year.**

   a Under $50,000
   b $50,000 - $99,999
   c $100,000 - $249,999
   d $250,000 - $499,999
   e $500,000 - $749,999
   f $750,000 - $999,999
   g $1 Million - $1,499,999
   h $1.5 Million - $2,499,999
   i Over $2.5 Million Please Specify _____

5. **Indicate your job title/position.**

   a Owner
   b President
   c Manager
   d Other Please Specify _____

6. **Indicate your highest level of education.**

   a Some High School
   b Completed High School
   c Some Technical School
   d Two-Year College Degree
   e Some Four-Year College
   f Bachelor's Degree Major _____
   g Some Graduate Work
   h Graduate Degree Major _____

ORGANIZATIONAL STRATEGY

For each item, please circle (O) the alternative that best describes your organization's strategy.

7. **In comparison to other apparel manufacturers, the products which we provide to our customers are best characterized as:** *(Circle one alternative)*

   a Products which are more innovative, continually changing and broader in range throughout the organization and marketplace.
   b Products which are fairly stable in certain units/departments and markets while innovative in other units/departments and markets.
   c Products which are well focused, relatively stable and consistently defined throughout the organization and marketplace.
   d Products which are in a state of transition, and largely based on responding to opportunities or threats from the marketplace or environment.

8. **In comparison to other apparel manufacturers, my organization has an image in the marketplace as an apparel manufacturer which:**

   a Offers fewer, selective products which are high in quality.
   b Adopts new ideas and innovations, but only after careful analysis.
   c Reacts to opportunities or threats in the marketplace to maintain or enhance our position.
   d Has a reputation for being innovative and creative.

9. **The amount of time my apparel manufacturer spends on monitoring changes and trends in the marketplace can best be described as:**

   a Lengthy: We are continuously monitoring the marketplace.
   b Minimal: We really don't spend much time monitoring the marketplace.
   c Average: We spend a reasonable amount of time monitoring the marketplace.
   d Sporadic: We sometimes spend a great deal of time and at other times spend little time monitoring the marketplace.

10. **In comparison to other apparel manufacturers, the increase or losses in demand which we have experienced are due most probably to:**

   a Our practice of concentrating on more fully developing those markets which we currently serve.
   b Our practice of responding to pressures of the marketplace by taking few risks.
   c Our practice of aggressively entering into new markets with new types of product offerings and services.
   d Our practice of assertively penetrating more deeply into markets we currently serve, while adopting new products only after a very careful review of their potential.

(continued next page)

ORGANIZATIONAL STRATEGY, Continued

For each item, please circle (O) the alternative that best describes your organization's strategy

11. **One of the most important goals in this apparel manufacturer, in comparison to other apparel manufacturers, is our dedication and commitment to:**
(Circle one alternative)

a Keep costs under control.
b Analyze our costs and revenues carefully, to keep costs under control and to selectively generate new products or enter new markets.
c Insure that the people, resources and equipment required to develop new products and new markets are available and accessible.
d Make sure that we guard against critical threats by taking whatever action is necessary.

12. **In contrast to other apparel manufacturers, the competencies (skills) which our managerial employees possess can best be characterized as:**

a Analytical: Their skills enable them to both identify trends and then develop new product offerings or markets.
b Specialized: Their skills are concentrated into one, or a few, specific areas.
c Broad and Entrepreneurial: Their skills are diverse, flexible, and enable change to be created.
d Fluid: Their skills are related to the near-term demands of the marketplace.

13. **The one thing that protects my organization from other apparel manufacturers is that we:**

a Are able to carefully analyze emerging trends and adopt only those which are proven potential.
b Are able to do a limited number of things exceptionally well.
c Are able to respond to trends even through they may possess only moderate potential as they arise.
d Are able to consistently develop new products and new markets.

14. **More so than many other apparel manufacturers, our management staff tends to concentrate on:**

a Maintaining a secure financial position through cost and quality control measures.
b Analyzing opportunities in the marketplace and selecting only those opportunities with proven potential, while protecting a secure financial position.
c Activities or business functions which most need attention given the opportunities or problems we currently confront.

ORGANIZATIONAL STRATEGY, Continued

For each item, please circle (O) the alternative that best describes your organization's strategy.

15. **In contrast to many other apparel manufacturers, my organization prepares for the future by:** *(Circle one alternative)*

a Identifying the best possible solutions to those problems or challenges which require immediate attention.

b Identifying trends and opportunities in the marketplace which can result in the creation of product offerings or services which are new to the apparel manufacturing industry or which reach new markets.

c Identifying those problems which, if solved will maintain and then improve our current product offerings and market position.

d Identifying those trends in the industry which other apparel manufacturers have proven possess long-term potential while also solving problems related to our current product offerings and our current customers' needs.

16. **In comparison to other apparel manufacturers, the structure of my organization is:**

a Functional in nature (i.e. organized by department - marketing, accounting, personnel, etc.).

b Product or market oriented (i.e. departments like dresses or outerwear have marketing or accounting responsibilities).

c Primarily functional (departmental) in nature; however, a product or market oriented structure does exist in newer or larger product offering areas.

d Continually changing to enable us to meet opportunities and solve problems as they arise.

17. **Unlike many other apparel manufacturers, the procedures my organization uses to evaluate our performance are best described as:**

a Decentralized and participatory encouraging many organizational members to be involved.

b Heavily oriented toward those reporting requirements which demand immediate attention.

c Highly centralized and primarily the responsibility of senior management

d Centralized in more established product areas and more participatory in newer product areas.

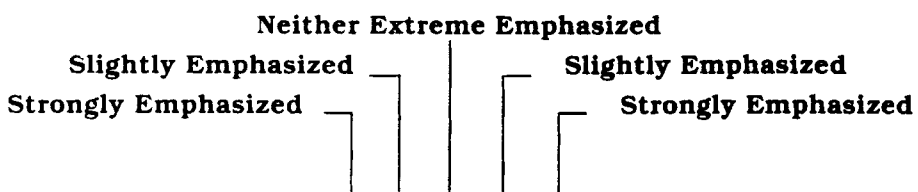
(continued next page)

COMPETITIVE METHODS

Each of the following items consists of a pair of statements which represent two extreme methods by which organizations may compete. Please consider each statement as it relates to your organization relative to competitors. Place an **X** at the position on the scale that best describes the emphasis your organization has placed on each item in establishing your competitive methods.

In this example the X indicates that the apparel manufacturer maintains inventory levels that are slightly higher than competitors.

Maintain low inventory levels	:___:___:___:**X**:___:	Maintain high inventory levels



18. Manufacturing speciality products	:___:___:___:___:___:	Manufacturing commodity products
19. Providing a narrow range of products	:___:___:___:___:___:	Providing a broad range of products
20. Serving limited or specific geographic markets	:___:___:___:___:___:	Serving broad markets
21. Continued new product development	:___:___ ___:___:___:	Maintaining current products
22. Reliance on proven manufacturing processes	:___:___:___:___:___:	Innovation in manufacturing processes
23. Providing minimal or no customer service	:___:___:___:___:___:	Provide high level of customer service
24. Lowest price offering	:___:___:___:___:___:	Premium pricing policy
25. Minimal advertising and promotion expense	:___:___:___:___:___:	High level of advertising and promotion expense
26. Lowest cost per unit not an overriding concern	:___:___:___:___:___:	Continuing, overriding concern for lowest cost per unit
27. High capacity utilization	:___:___:___:___:___:	Excess capacity tolerated in anticipation of future growth
28. Emphasis on serviceable product quality	:___:___:___:___:___:	Emphasis on superior product quality

COMPETITIVE METHODS, continued

	Strongly Emphasized	Slightly Emphasized	Neither Extreme Emphasized	Slightly Emphasized	Strongly Emphasized	
29.						Ownership of patents or other proprietary knowledge
30.						Developing brand identification and name recognition
31.						Develop new channels of distribution
32.						Continuous concern with minimizing general and administration expenses
33.						Large number of customers
34.						Customers make infrequent purchases
35.						Average customer order large
36.						Sell products to numerous market segments
37.						Extensive backward integration toward raw materials
38.						Extensive forward integration toward consumer
39.						Many channels of distribution
40.						Generate capital through outside investors
41.						Fully integrated production
42.						Long-term buyer contracts
43.						Entered the market(s) on a large scale with rapid, immediate growth objectives

(continued next page)

ORGANIZATIONAL PERFORMANCE

For each item please circle (0) the number that best describes your perception of your organization's performance.

		Much Worse	Moderately Worse	Slightly Worse	Neither Worse or Better	Slightly Better	Moderately Better	Much Better
In comparison to other apparel manufacturers, my organization's . . .								
44.	profitability is:	1	2	3	4	5	6	7
45.	return on investment is:	1	2	3	4	5	6	7
46.	overall firm performance is:	1	2	3	4	5	6	7

THANK YOU FOR PARTICIPATING IN THIS STUDY.

Please return your completed survey in the self-addressed, prepaid envelope or mail to:

Catherine Leonard
Oklahoma State University
Department of Design, Housing & Merchandising
College of Home Economics HE 431
Stillwater, OK 74078-0337

_____ This number is for follow-up purposes only.

APPENDIX B

FREQUENCY DISTRIBUTIONS:

ORGANIZATIONAL

CHARACTERISTICS

Table 4. Frequency distribution of organizational characteristics of respondents (*N*=151).

Variables	*f*	%
Classification		
Apparel Manufacturer	98	64.9
Contractor	33	21.9
Subcontractor	7	4.6
Other	13	8.6
Standard Industrial Classification		
2331	30	19.9
2335	19	12.6
2337	24	15.9
2339	78	51.7
Total Years in Business		
< 1	0	0.0
1-4	1	.7
5-9	18	11.9
10-14	27	17.9
≥ 15	105	69.5
Total Number of Employees		
< 5	3	2.0
5-9	11	7.3
10-24	19	12.6
25-49	4	2.6
50-99	47	31.1
100-249	35	23.2
250-499	8	5.3
500-999	12	7.9
1,000-2,499	5	3.3
≥ 2,500	7	4.6
Annual Sales Volume (Optional)[a]		
< $50,000	4	3.0
$50,000-$99,999	3	2.2
$100,000-$249,999	8	6.0
$250,000-$499,999	12	9.0
$500,000-$749,999	4	3.0
$750,000-$999,999	8	6.0
$1 Million-$1,499,999	14	10.4
$1.5 Million-$2,499,999	17	12.7
≥ $2.5 Million	64	47.8
Job Title/Position		
Owner	42	27.8
President	36	23.8
Manager	28	18.5
Other	45	29.8
Highest Level of Education		
Some High School	2	1.3
Completed High School	15	9.9
Some Technical School	7	4.6
Two-Year College Degree	12	7.9
Some Four-Year College	25	16.6
Bachelor's Degree	50	33.1
Some Graduate Work	14	9.3
Graduate Degree	26	17.2
Geographical Region		
Northeast	49	32.5
Midwest	18	11.9
South	57	37.7
West	27	17.9

Note. Column percentages total 100.0.
[a]Frequency missing values for annual sales volume (optional) equaled 17.

Table 5. Frequency distribution of organizational characteristics with other category responses of respondents (*N*=151).

Variable	*f*	%
Classification		
Apparel Manufacturer	98	64.9
Contractor	33	21.9
Subcontractor	7	4.6
Other[a]	13	8.6
Job Title/Position		
Owner	42	27.8
President	36	23.8
Manager	106	18.5
Other[b]	45	29.8
Highest Level of Education		
Some High School	2	1.3
Completed High School	15	9.9
Some Technical School	7	4.6
Two-Year College Degree	12	7.9
Some Four-Year College	25	16.6
Bachelor's Degree[c]	50	33.1
Some Graduate Work	14	9.3
Graduate Degree[d]	26	17.2

[a]Apparel Manufacturer and Contractor 8; Apparel Manufacturer and Subcontractor 1; Apparel Manufacturer and Import Distributor 4

[b]Owner and President 10; Vice-President 6; Owner/President/Manager 3; Vice-President of Manufacturing 3; Bookkeeper 2; Chairman 2; Office Manager 2; Chief of Engineering 1; Chief Executive Officer 1; Chief Financial Officer 1; Controller 1; Designer 1; Director of Merchandise 1; Director and Planner 1; General Manager 1; Owner and Chief Executive Officer 1; Personnel Manager 1; Planner 1; Retail Manager 1; Treasurer 1; Vice-President of Administration 1; Vice-President of Human Resources 1; Vice-President of Operations 1; Vice-President of Regions 1

[c]Business 8; Business Administration 8; Accounting 4; Industrial Engineering 4; English 3; Industrial Management 3; Finance 2; Home Economics - Textiles and Clothing 2; Marketing 2; Agriculture 1; Biochemistry 1; Communications 1; Design 1; Economics 1; Fashion Merchandising 1; Foreign Language 1; Home Economics 1; Industrial Relations 1; Industrial Technology 1; Management of Industrial Design 1; Psychology 1; Textiles 1; Visual Arts and Management 1

[d]Juristic Doctorate 1; Master of Science 14; Master of Business Administration 5; Master of Arts 2; Master of Fine Arts 1; Master of Architecture 1; Other 2

Table 6. Frequency distribution of geographical region of respondents by state (*N*=151).

Region/State		*f*	%
Northeast			
MA		2	1.3
ME		1	.7
NJ		7	4.6
NY		23	15.3
PA		14	9.3
VT		2	1.3
	Total	49	32.5
Midwest			
IA		2	1.3
IN		2	1.3
KS		3	2.0
MI		1	.7
MO		6	4.0
MN		2	1.3
OH		2	1.3
	Total	18	11.9
South			
AL		3	2.0
AR		1	.7
FL		6	4.0
GA		4	2.5
KY		1	.7
LA		1	.7
MD		3	2.0
MS		7	4.6
NC		10	6.6
OK		3	2.0
SC		2	1.3
TN		6	4.0
TX		7	4.6
VA		3	2.0
	Total	57	37.7
West			
CA		19	12.4
CO		1	.7
HI		3	2.0
NM		1	.7
OR		1	.7
UT		1	.7
WA		1	.7
	Total	27	17.9

APPENDIX C

INDIVIDUAL INSTRUMENT ITEMS:

ORGANIZATIONAL STRATEGY

ORGANIZATIONAL STRATEGY

7. *Entrepreneurial — Product Market Domain*[a]
In comparison to other apparel manufacturers, the products which we provide to our customers are best characterized as: *(Circle one alternative)*

a Products which are more innovative, continually changing and broader in nature throughout the organization and marketplace. (P)[b]
b Products which are fairly stable in certain units/departments and markets while innovative in other units/departments and markets. (A)
c Products which are well focused, relatively stable and consistently defined throughout the organization and marketplace. (D)
d Products which are in a state of transition, and largely based on responding to opportunities or threats from the marketplace or environment. (R)

8. *Entrepreneurial — Success Posture*
In contrast to other apparel manufacturers, my organization has an image in the marketplace as an apparel manufacturer which:

a Offers fewer, selective products which are high in quality. (D)
b Adopts new ideas and innovations, but only after careful analysis. (A)
c Reacts to opportunities or threats in the marketplace to maintain or enhance our position. (R)
d Has a reputation for being innovative and creative. (P)

9. *Entrepreneurial — Surveillance*
The amount of time my apparel manufacturer spends on monitoring changes and trends in the marketplace can best be described as:

a Lengthy: We are continuously monitoring the marketplace. (P)
b Minimal: We really don't spend much time monitoring the marketplace. (D)
c Average: We spend a reasonable amount of time monitoring the marketplace. (A)
d Sporadic: We sometimes spend a great deal of time and at other times spend little time monitoring the marketplace. (R)

10. *Entrepreneurial — Growth*
In comparison to other apparel manufacturers, the increase or losses in demand which we have experienced are due most probably to:

a Our practice of concentrating on more fully developing those markets which we currently serve. (D)
b Our practice of responding to the pressures of the marketplace by taking few risks. (R)
c Our practice of aggressively entering into new markets with new types of product offerings and services. (P)
d Our practice of assertively penetrating more deeply into markets we currently serve, while adopting new products only after a very careful review of their potential. (A)

(continued next page)

ORGANIZATIONAL STRATEGY, Continued

11. *Engineering — Technological Goal*
One of the most important goals in this apparel manufacturer, in comparison to other apparel manufacturers, is our dedication and commitment to:
(Circle one alternative)

a Keep costs under control. (D)
b Analyze our costs and revenues carefully, to keep costs under control and to selectively generate new products or enter new markets. (A)
c Insure that the people, resources and equipment required to develop new products and new markets are available and accessible. (P)
d Make sure that we guard against critical threats by taking whatever action is necessary. (R)

12. *Engineering — Technological Breadth*
In contrast to other apparel manufacturers, the competencies (skills) which our managerial employees possess can best be characterized as:

a Analytical: Their skills enable them to both identify trends and then develop new product offerings or markets. (A)
b Specialized: Their skills are concentrated into one, or a few, specific areas. (D)
c Broad and Entrepreneurial: Their skills are diverse, flexible, and enable change to be created. (P)
d Fluid: Their skills are related to the near-term demands of the marketplace. (R)

13. *Engineering — Technological Buffers*
The one thing that protects my organization from other apparel manufacturers is that we:

a Are able to carefully analyze emerging trends and adopt only those which are proven potential. (A)
b Are able to do a limited number of things exceptionally well. (D)
c Are able to respond to trends even though they may possess only moderate potential as they arise. (R)
d Are able to consistently develop new products and new markets. (P)

14. *Administrative — Dominant Coalition*
More so than many other apparel manufacturers, our management staff tends to concentrate on:

a Maintaining a secure financial position through cost and quality control measures. (D)
b Analyzing opportunities in the marketplace and selecting only those opportunities with proven potential, while protecting a secure financial position. (A)
c Activities or business functions which most need attention given the opportunities or problems we currently confront. (R)
d Developing new products and expanding into new markets or market segments. (P)

ORGANIZATIONAL STRATEGY, Continued

15. *Administrative — Planning*
In contrast to many other apparel manufacturers, my organization prepares for the future by: *(Circle one alternative)*

a Identifying the best possible solutions to those problems or challenges which require immediate attention. (R)
b Identifying trends and opportunities in the marketplace which can result in the creation of product offerings or services which are new to the apparel manufacturing industry or which reach new markets. (P)
c Identifying those problems which, if solved will maintain and then improve our current product offerings and market position. (D)
d Identifying those trends in the industry which other apparel manufacturers have proven possess long-term potential while also solving problems related to our current product offerings and our current customers' needs. (A)

16. *Administrative — Structure*
In comparison to other apparel manufacturers, the structure of my organization is:

a Functional in nature (i.e. organized by department - marketing, accounting, personnel, etc.). (D)
b Product or market oriented (i.e. departments like dresses or outerwear have marketing or accounting responsibilities). (P)
c Primarily functional (departmental) in nature; however, a product or market oriented structure does exist in newer or larger product offering areas. (A)
d Continually changing to enable us to meet opportunities and solve problems as they arise. (R)

17. *Administrative — Control*
Unlike many other apparel manufacturers, the procedures my organization uses to evaluate our performance are best described as:

a Decentralized and participatory encouraging many organizational members to involved. (P)
b Heavily oriented toward those reporting requirements which demand immediate attention. (R)
c Highly centralized and primarily the responsibility of senior management. (D)
d Centralized in more established product areas and more participatory in newer product areas. (A)

(continued next page)

[a] Coded for identification of the 11 item scale developed by Conant, Mokwa and Varadarajan (1990) for operationalizing Miles and Snow's (1978) adaptive cycle and strategic typology. Not part of the instrument during data collection.

[b] Coded for identification of the strategic type alternatives used to analyze the collected data. D=Defender; P=Prospector; A=Analyzer and R=Reactor. Not part of the instrument during data collection.

APPENDIX D

FREQUENCY DISTRIBUTIONS:

ORGANIZATIONAL

STRATEGY

Table 7. Frequency distribution of organizational strategy items of respondents by strategic type alternatives (*N*=151).

Variable	Strategic Type: Defender *f*	Defender %	Prospector *f*	Prospector %	Analyzer *f*	Analyzer %	Reactor *f*	Reactor %
Entrepreneurial								
Product Market Domain	65	43.00	26	17.20	46	30.50	14	9.30
Success Posture	58	38.40	36	23.80	28	18.50	29	19.20
Surveillance	29	19.20	43	28.50	60	39.70	19	12.60
Growth	57	37.70	14	9.30	42	27.80	38	25.20
Engineering								
Technological Goal	41	27.20	19	12.60	71	47.00	20	13.20
Technological Breadth	54	35.80	51	33.80	15	9.90	31	20.50
Technological Buffers	75	49.70	15	9.90	22	14.60	39	25.8
Administrative								
Dominant Coalition	56	37.10	14	9.30	37	24.50	44	29.10
Planning	55	36.40	36	23.80	26	17.20	34	22.50
Structure	62	41.10	12	7.90	20	13.20	57	37.70
Control	66	43.70	44	29.10	19	12.60	22	14.60

Note. Row percentages total 100.0.

Table 8. Frequency distribution of consistent organizational strategy items selected by respondents within each strategic type classification (*N*=151).

Variable	Strategic Type: Defender *f*	Defender %	Prospector *f*	Prospector %	Analyzer *f*	Analyzer %	Reactor *f*	Reactor %
Strategic Type Classification	66	43.70	18	11.90	36	23.80	31	20.50
Entrepreneurial								
Product Market Domain								
Defender	45	29.80	1	.66	15	9.93	4	2.65
Prospector	6	3.97	12	7.95	4	2.65	4	2.65
Analyzer	12	7.95	5	3.31	15	9.93	14	9.27
Reactor	3	1.99	0	0.00	2	1.32	9	5.96
Success Posture								
Defender	44	29.14	1	.66	7	4.64	6	3.97
Prospector	6	3.97	13	8.61	8	5.30	9	5.96
Analyzer	7	4.64	2	1.32	17	11.26	2	1.32
Reactor	9	5.96	2	1.32	4	2.65	14	9.27
Surveillance								
Defender	23	15.23	2	1.32	1	.66	3	1.99
Prospector	10	6.62	14	9.27	11	7.28	8	5.30
Analyzer	21	13.91	1	.66	23	15.23	15	9.93
Reactor	12	7.95	1	.66	1	.66	5	3.31

Table 8. (Continued)

Variable	Strategic Type: Defender *f*	Defender %	Prospector *f*	Prospector %	Analyzer *f*	Analyzer %	Reactor *f*	Reactor %
Growth								
Defender	37	24.50	7	4.64	5	3.31	8	5.30
Prospector	2	1.32	5	3.31	4	2.65	3	1.99
Analyzer	10	6.62	5	3.31	21	13.91	6	3.97
Reactor	17	11.26	1	.66	6	3.97	14	9.27
Engineering								
Technological Goal								
Defender	30	19.87	1	.66	3	1.99	7	4.64
Prospector	4	2.65	4	2.65	10	6.62	1	.66
Analyzer	24	15.89	12	7.95	21	13.91	14	9.27
Reactor	8	5.30	1	.66	2	1.32	9	5.96
Technological Breadth								
Defender	38	25.17	3	1.99	7	4.64	6	3.97
Prospector	16	10.60	11	7.28	15	9.93	9	5.96
Analyzer	4	2.65	1	.66	8	5.30	2	1.32
Reactor	8	5.30	3	1.99	6	3.97	14	9.27
Technological Buffers								
Defender	53	35.10	1	.66	11	7.28	10	6.62
Prospector	0	0.00	9	5.96	5	3.31	1	.66
Analyzer	7	4.64	1	.66	12	7.95	2	1.32
Reactor	6	3.97	7	4.64	8	5.30	18	11.92

Table 8. (Continued)

Variable	Strategic Type: Defender *f*	Defender %	Prospector *f*	Prospector %	Analyzer *f*	Analyzer %	Reactor *f*	Reactor %
Administrative								
Dominant Coalition								
Defender	37	24.50	2	1.32	9	5.96	8	5.30
Prospector	2	1.32	7	4.64	3	1.99	2	1.32
Analyzer	12	7.95	4	2.65	17	11.26	4	2.65
Reactor	15	9.93	5	3.31	7	4.64	17	11.26
Planning								
Defender	34	22.52	3	1.99	11	7.28	7	4.64
Prospector	9	5.96	15	9.93	9	5.96	3	1.99
Analyzer	8	5.30	0	0.00	11	7.28	7	4.64
Reactor	15	9.93	0	0.00	5	3.31	14	9.27
Structure								
Defender	37	24.50	6	3.97	13	8.61	6	3.97
Prospector	6	3.97	1	.66	3	1.99	2	1.32
Analyzer	6	3.97	1	.66	8	5.30	5	3.31
Reactor	17	11.26	10	6.62	12	7.95	18	11.92
Control								
Defender	39	25.83	5	3.31	12	7.95	10	6.62
Prospector	18	11.92	11	7.28	10	6.62	5	3.31
Analyzer	2	1.32	1	.66	11	7.28	5	3.31
Reactor	7	4.64	1	.66	3	1.99	11	7.28

Note. Row percentages total 100.00.

APPENDIX E

MEAN VALUES AND STANDARD DEVIATIONS: COMPETITIVE METHODS AND ORGANIZATIONAL PERFORMANCE

Table 9. Mean values for competitive methods emphasized by respondents (*N*=151).

Variable	Mean	SD
Product Type(s)		
Specialty/Commodity	2.49	1.34
Product Range		
Narrow/Broad	2.96	1.31
Geographic Markets		
Limited/Broad	3.54	1.33
Product Development		
New/Current	2.86	1.31
Manufacturing Processes		
Proven/Innovation	2.70	1.31
Customer Service		
Minimal/High	4.16	1.15
Pricing		
Lowest/Premium	3.05	1.20
Advertising and Promotion		
Minimal/High	2.13	1.11
Lowest Cost Per Unit		
Not Concern/Concern	3.24	1.20
Capacity Utilization		
High/Excess	2.58	1.19
Product Quality		
Serviceable/Superior	4.01	1.29
Proprietary Advantage		
Public Domain/Patents or Other Proprietary Knowledge	2.74	1.11
Brand Identification		
Let Take Care of Themselves/ Developing	3.17	1.35
Channels of Distribution		
Existing/New	3.28	1.20

Table 9. (continued)

Variable	Mean	SD
General and Administration Expenses		
Excess/Minimizing	3.50	1.26
Number of Customers		
Small/Large	2.99	1.46
Customer Purchases		
Frequent/Infrequent	2.20	1.31
Customer Order		
Small/Large	3.28	1.28
Market Segment(s)		
One/Numerous	3.07	1.35
Backward Integration		
No/Extensive	2.83	1.08
Forward Integration		
No/Extensive	3.28	.99
Number of Channels		
Single/Many	3.26	1.24
Source of Capital		
Parent Company or Operations/ Outside Investors	1.89	1.15
Production		
Subcontracting or Sourcing/ Fully Integrated	3.07	1.42
Buyer Contracts		
Short-Term/Long-Term	3.04	1.11
Market Entry with Growth Objectives		
Small Scale with Steady Growth/ Large Scale with Rapid Growth	2.21	1.07

Note. All variables were measured on a five point bi-polar scale. The / delineates the left and right anchor for each variable. A low mean indicates emphasis on the left anchor.

Table 10. Mean values of respondents' perceptions of organizational performance (*N*=151).

Variable	Mean	SD
Profitability	4.62	1.39
Return on Investment	4.59	1.49
Overall Firm Performance	5.09	1.35

Note. All variables were measured on a seven point scale.

APPENDIX F

CORRESPONDENCE

OSU

Oklahoma State University

DEPARTMENT OF DESIGN, HOUSING & MERCHANDISING
College of Home Economics

STILLWATER, OKLAHOMA 74078-0337
HOME ECONOMICS 431
(405) 744-5035

Dear Owner/President/Manager:

New product development, flexible manufacturing processes, and administrative expenses affect strategy in the apparel industry. A large number of manufacturers face a slow-growing U.S. market challenged by foreign products. Researchers at Oklahoma State University are studying competitive methods in the apparel industry as viewed by manufacturers.

This is an opportunity for apparel manufactures in the U.S. to express their views on organizational strategy and performance. **Your response is vital to the study and will be kept confidential.** Please take a few minutes to complete the survey and return in the enclosed self-addressed, prepaid envelope.

Thank you for volunteering to participate in this study. **Your prompt return of the survey will help us to better serve apparel manufacturers.**

Sincerely,

Catherine Leonard
Graduate Student

Dr. Lynn Sisler
Professor and Head of Department

CENTENNIAL
1890 • 1990

Celebrating the Past Preparing for the Future

Oklahoma State University

APPAREL INDUSTRY SURVEY

Your Response Is Important!!!

Please return the completed survey
by June 30, 1992.

Thank you.

Oklahoma State University
DEPARTMENT OF DESIGN, HOUSING & MERCHANDISING
College of Home Economics
Stillwater, Oklahoma 74078-0337

Dear Owner/President/Manager,

Recently you should have received an Apparel Industry Survey.
If you have already returned the survey, **THANK YOU!**
If you have not completed the Apparel Industry Survey,
a response by **June 30, 1992** would be appreciated.

WE VALUE YOUR RESPONSE!!

Sincerely,

Catherine Leonard
Graduate Student

Dr. Lynn Sisler
Professor and Head of Department

Your Response Is Important!!!

Your response to the **Apparel Industry Survey** will help us better serve apparel manufacturers. Please take a few minutes to express your views on strategy and return the completed survey. A response by July 20, 1992 is appreciated.

Thank You.

Oklahoma State University
DEPARTMENT OF DESIGN, HOUSING & MERCHANDISING
College of Home Economics
Stillwater, Oklahoma 74078-0337

Dear Owner/President/Manager,

Recently you should have received an Apparel Industry Survey. If you have already returned the survey, **THANK YOU!** If you have not completed the Apparel Industry Survey, a response by **July 25, 1992** would be appreciated.

WE VALUE YOUR RESPONSE!!

Sincerely,

Catherine Leonard
Graduate Student

Dr. Lynn Sisler
Professor and Head of Department

Oklahoma State University

Your Response Is Important!!!

A complete response to the ***Apparel Industry Survey*** *will help us better serve apparel manufacturers.*
Please take a few minutes to express your views on strategy for each circled item.
Your completed response by ***July 25, 1992*** *is appreciated.*

Thank you.

Oklahoma State University

Your Response Is Important!!!

A complete response to the ***Apparel Industry Survey*** *will help us better serve apparel manufacturers.*
Please take a few minutes to express your views on strategy for each circled item.
Your completed response by ***August 5, 1992*** *is appreciated.*

Thank you.

APPENDIX G

ANALYSIS OF VARIANCE: STRATEGIC TYPE CLASSIFICATIONS ON COMPETITIVE METHODS

Table 11. Results of analysis of variance between strategic type classifications on competitive methods emphasized by the respondents (*N*=151, *df*=3,147).

Variables	*M* Strategic Type Classifications[a] D (*n*=66)	P (*n*=18)	A (*n*=36)	R (*n*=31)	*F*	Fisher's *LSD*
Product Type(s) Specialty/Commodity	2.41	1.89	2.78	2.68	2.10	-
Product Range Narrow/Broad	2.41	3.44	3.44	3.29	7.98***	A>D;P>D;R>D
Geographic Markets Limited/Broad	3.32	3.83	3.64	3.71	1.14	-
Product Development New/Current	3.33	1.67	2.64	2.81	9.60***	D>R;D>A;D>P R>P;A>P
Manufacutring Processes Proven/Innovation	2.64	2.94	2.56	2.84	.52	-
Customer Service Minimal/High	4.09	4.56	4.31	3.90	1.51	-
Pricing Lowest/Premium	2.95	3.44	3.36	2.68	2.66	-
Advertising and Promotion Minimal/High	1.94	2.78	2.31	1.94	3.48*	P>D;P>R
Lowest Cost Per Unit Not Concern/Concern	3.36	2.94	3.25	3.13	.68	-
Capacity Utilization High/Excess	2.68	2.50	2.42	2.61	.42	-
Product Quality Serviceable/Superior	4.06	4.11	4.83	3.77	.45	-

Table 11. (Continued)

Variable	*M* Strategic Type Classifications[a] D (*n*=66)	P (*n*=18)	A (*n*=36)	R (*n*=31)	*F*	Fisher's *LSD*
Proprietary Advantage Public Domain/Patents or Other Proprietary Knowledge	2.74	2.72	2.83	2.65	.16	-
Brand Identification Let Take Care of Themselves/ Developing	2.65	4.06	3.50	3.35	7.58***	P>D;A>D;R>D
Channels of Distribution Existing/New	2.79	4.28	3.50	3.48	10.20***	P>A;P>R;P>D A>D;R>D
General and Administration Expenses Excess/Minimizing	3.39	3.50	3.64	3.55	.31	-
Number of Customers Small/Large	2.48	4.06	3.17	3.23	7.03**	P>R;P>A;P>D R>D;A>D
Customer Purchases Frequent/Infrequent	2.09	2.00	2.31	2.42	.88	-
Customer Order Small/Large	3.41	2.83	3.28	3.29	.96	-
Market Segment(s) One/Numerous	2.68	3.50	3.22	3.48	3.73*	P>D;R>D;A>D
Backward Integration No/Extensive	2.88	2.72	2.83	2.81	.11	-
Forward Integration No/Extensive	3.27	3.61	3.25	3.13	.93	-
Number of Channels Single/Many	2.82	4.00	3.39	3.65	6.79**	P>D;R>D;A>D

Table 11. (Continued)

Variable	*M* Strategic Type Classifications[a] D (*n*=66)	P (*n*=18)	A (*n*=36)	R (*n*=31)	*F*	Fisher's *LSD*
Source of Capital Parent Company or Operations/ Outside Investors	1.71	1.56	2.25	2.06	2.52	-
Production Subcontracting or Sourcing/ Fully Integrated	3.26	2.89	2.69	3.23	1.46	-
Buyer Contracts Short-Term/Long-Term	3.06	2.83	3.11	3.03	.26	-
Market Entry with Growth Objectives Small Scale with Steady Growth/ Large Scale with Rapid Growth	2.09	2.00	2.44	2.32	1.19	-

Note. The mean values ranged between 1.00 and 5.00 for all variables.
[a]D=Defender, P=Prospector, A=Analyzer and R=Reactor.
$^{*}p<.05$ $^{**}p<.01$ $^{***}p<.001$.

APPENDIX H

INSTITUTIONAL REVIEW BOARD:

FORM AND CORRESPONDENCE

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
FOR HUMAN SUBJECTS RESEARCH

Proposal Title: Small Manufacturers' Perceptions of Conditions that Influence Competition and Profits in the Apparel Industry

Principal Investigator: Lynn Sisler/Catherine Leonard

Date: April 23, 1991 IRB # HE-91-027

This application has been reviewed by the IRB and

Processed as: Exempt [x] Expedite [ ] Full Board Review [ ]

Renewal or Continuation [ ]

Approval Status Recommended by Reviewer(s):

Approved [x] Deferred for Revision [ ]

Approved with Provision [ ] Disapproved [ ]

Approval status subject to review by full Institutional Review Board at next meeting, 2nd and 4th Thursday of each month.

Comments, Modifications/Conditions for Approval or Reason for Deferral or Disapproval:

Signature: _____ Date: May 1, 1991
Chair of Institutional Review Board

Oklahoma State University

DEPARTMENT OF DESIGN, HOUSING & MERCHANDISING
College of Home Economics

STILLWATER, OKLAHOMA 74078-0337
HOME ECONOMICS 431
405) 744-5035

July 16, 1991

Oklahoma State University
Institutional Review Board
Terry Maciula
Executive Secretary
Office of University Research Services
001 Life Sciences East
Stillwater, OK 74078

Dear Terry:

The questionnaire for the approved Institutional Review Board (IRB) project number HE-91-027 has been modified. A copy of the modified questionnaire is attached for approval by the IRB.

Sincerely,

Dr. Lynn Sisler
Professor and Head of Department

Catherine Leonard
Graduate Associate

Celebrating the Past Preparing for the Future

Oklahoma State University

DEPARTMENT OF DESIGN, HOUSING & MERCHANDISING
College of Home Economics

STILLWATER, OKLAHOMA 74078-0337
HOME ECONOMICS 431
405-744-5035

February 28, 1995

Oklahoma State University
Institutional Review Board
Jennifer Moore
Executive Secretary
Office of University Research Services
001 Life Sciences East
Stillwater, OK 74078

Dear Jennifer:

The proposal title for the approved Institutional Review Board (IRB) project number HE-91-027 has been changed. The proposed title was *Small Manufacturers' Perceptions of Conditions that Influence Competition and Profits in the Apparel Industry*. The title of my dissertation was changed to *Apparel Manufacturers' Perceptions of Organizational Characteristics, Organizational Strategy, Competitive Methods, and Organizational Performance*. Please attach this letter of notification of a modification to IRB # HE-01-027.

Sincerely,

Dr. Lynn Sisler
Associate Dean
Undergraduate Programs
and Services

Catherine Leonard
Graduate Student

VITA

Catherine L. Leonard

Candidate for the Degree of

Doctor of Philosophy

Thesis: APPAREL MANUFACTURERS' PERCEPTIONS OF ORGANIZATIONAL CHARACTERISTICS, ORGANIZATIONAL STRATEGY, COMPETITIVE METHODS, AND ORGANIZATIONAL PERFORMANCE

Major Field: Human Environmental Sciences

Biographical:

Personal Data: Born in Minneapolis, Minnesota, October 31, 1957, daughter of B. Jack and Catherine F. Leonard.

Education: Graduated from Wauwatosa West High School, Milwaukee, Wisconsin, 1976; received Bachelor of Science degree in Education from John Brown University, in 1980; received the Master of Science degree in Home Economics from University of Arkansas in 1983; completed requirements for Doctor of Philosophy degree in Human Environmental Sciences at Oklahoma State University, May, 1995.

Professional Experience: Graduate Teaching Assistant, College of Agriculture and Home Economics, University of Arkansas, 1981-1983; Instructor, Department of Home Economics, Central Missouri State University, Warrensburg, 1983-1987; Part-Time Retail Sales Associate and Contingent, Halls Merchandising, Inc., Kansas City, Missouri, 1984-1987; Graduate Teaching Associate, Clothing, Textiles, and Merchandising, Oklahoma State University, 1987-1991; Assistant Professor, Fashion Department, Mount Mary College, Milwaukee, Wisconsin, 1991-Present.

Professional Affiliations: American Collegiate Retailing Association; American Association of Family and Consumer Sciences; Kappa Omicron Phi; International Textile and Apparel Association; The Fashion Group International, Inc. - Chicago; Phi Upsilon Omicron; Wisconsin Association of Family and Consumer Sciences.