Export market decision making, cognitive competencies and export performance: an empirical investigation

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- **Abstract**: This paper investigates experienced exporters' use of foreign environmental information in decision making. It specifically examines the cognitive structure or "mental map" that export managers' manifest when considering market alternatives in the international arena. Guided by past research and the procedure of logical partitioning, the authors first identify and propose a cognitive structure consisting of three levels of export market information, – including (1) primary environmental constructs, (2) secondary export concepts, and (3) specific export market decision variables. Findings indicate practicing, experienced export managers do manifest a distinct cognitive export information structure, and they consider information related to export market selection to be hierarchical in value when analyzing international markets. Results also indicate that exporters who manifest a proactive and systematic approach to export market decision making tend to have greater success in their exporting activities.

- **Resumen:** Este artículo investiga el uso que le dan los exportadores con experiencia para la toma de decisiones a la información en el ambiente de negocios. Específicamente, examina la estructura cognoscitiva o el "mapa mental" que los exportadores manifiestan cuando consideran nuevos mercados. Con base en investigaciones previas y en el procedimiento de partición lógica, identificamos tres niveles de estructura cognoscitiva de la información para exportar: 1) Construcciones primarias del ambiente; 2) conceptos secundarios de exportación; 3) variables específicas para la toma de decisiones al exportar. Nuestros hallazgos indican que los exportadores con experiencia manifiestan una estructura cognoscitiva de información distinta y la consideran je-

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rárquica en valor cuando se analizan los mercados internacionales. Los resultados también indican que los exportadores que manifiestan una actitud proactiva y sistemática en la toma de decisiones relacionadas con la exportación tienden a tener más éxito en sus actividades

■ **Key words**: Cognitive structure, export market decisions making.

■ **JEL classification:** M16

■ *Introduction*

It is useful to examine cognitive competencies to better understand how decision makers conceptualize and solve problems (Ruble and Cosier, 1990). Researchers in the area of cognitive science span an array of interdisciplinary fields including psychology, semantics and linguistics, management science, information economics, philosophy, artificial intelligence, neuroscience, anthropology and others (Massarik, 1977; Johnson-Laird, 1983; Goldman, 1993; Stillings, 1995; McConnell, 1995; Thargard, 1996). A common thread in each of these perspectives is that knowledge related to a given field of interest is organized into packets of distinct, yet interrelated, "chunks" or "clusters" of information in memory. The more experience or background one brings to a field of interest, the more tightly knit these clusters, and by definition, the more cognitively competent is the decision maker faced with an action or decision (Goodman, 1968; Hastie, 1981; von Eckardt, 1993). In short, experience often brings well-defined "mental maps" that aid individuals in understanding and acting upon their world, and leads to enhanced capabilities within the realm of such actions (Srull, 1981; Daft, Sormunen and Parks, 1988; Srull and Wyer, 1989; Sillince, 1995).

Previous research has also shown clusters of mental information to often be hierarchical in nature (Park, Jain and Krishnamurthi, 1998). Experienced individuals, when faced with a decision in their particular field of expertise, tend to place greater utility upon some clusters of information relative to others. In the case of a manager faced with a strategic decision-making task, the most important clusters in his or her "mental map" must convey a favorable environment, or a positive set of circumstances before other less important clusters are considered. Hierarchical clustering of information is said to represent advanced cognitive ability to distinguish between complex concepts as they relate to

decision making. It has long been theorized that experienced decision-makers to manifest well-grounded mental frameworks, the distinct parts of which can often be arrayed in a logical pecking order (Spearman, 1927; Thurstone and Thurstone, 1941; John and Whitney, 1986; Jackson and Dutton, 1988; Sillince, 1995).

The research undertaken in this study focuses on mental frameworks used in export decision making. Specifically, experienced exporters' cognitive capabilities (mental organization) and valuation (hierarchy) of information related to the selection of export markets are examined. This research focuses on the mental map that may be shared by multiple, yet dissimilar, decision makers engaged in the business of exporting. The study examines whether a common pattern of interrelationships (a "mental map") is evident in the minds of experienced exporters and, if so, whether or not the parts of that map are sequenced hierarchically in terms of their relative importance to export market selection.

The research also provides exploratory evidence concerning export market orientation and subsequent export outcomes and expectations of export outcomes. The former is defined as the degree to which exporters proactively and systematically analyze export markets. While experience may lead to enhanced abilities to logically examine one's world (i.e., having a well developed cognitive structure), it is the degree to which such abilities are systematically and proactively used that, more often than not, determines an organization's success or failure (Miller, 1987; Mintzberg, 1990). Likewise, if experienced exporters manifested well-organized, hierarchical mental structures of information related to the export environment, this knowledge could provide meaningful insights to a variety of groups (e.g., prospective exporters, advisors to exporters), thus lending considerable value to this area of research, this is particularly true if the systematic and proactive use of information embedded in such structures is also related to export success.

Three specific research questions are investigated. The first relates to the mental organization of export market information. Specifically, do experienced exporters manifest a cognitive structure related to export market selection that is logical and theoretically grounded?

The second research question relates sequentially to the first and is focused on the valuation of distinct clusters of export market information; namely, if RQ 1 is verified, do experienced exporters then value export market information hierarchically?

The third research question relates to the export market orientation and analysis; more specifically, do experienced exporters, who tend to be proactive and systematic in their approach to export opportunity eval-

uation, also tend to be more successful in their current export endeavors and more optimistic with respect to their future export endeavors?

To examine these three research questions, the authors (a) develop a comprehensive export market information framework that theoretically reflects the cognitive underpinnings of experienced export managers; (b) provide empirical evidence of the integrity of the framework by examining data from a sample of experienced exporters; (c) evaluate the degree to which "clusters" of information contained in the cognitive structures of the sampled exporters is hierarchical in nature; (d) offer exploratory evidence concerning the relationship between exporters' orientation to exporting (proactive/systematic) and their current export performance and future export expectation, and (e) suggest additional directions for future research in this area, and provide managerial implications of the findings of this study. To briefly establish the context of this study some background information is provided.

- *Cognitive competencies*
  What are they? How are they useful? Do exporters have them?

Advanced cognitive competencies are defined as the ability to interprete, organize and use information. It has been examined under the rubric of "cognitive structure." Indeed, the notion that distinct cognitive structures exist between experts and lay people has been a cornerstone of cognitive psychology for some time (Tolman, 1948). Cognitive structures have been defined as mental schema, or representations of characteristics in a given area of expertise (Rosch, et al, 1976; Eden and Cropper, 1992; Sillince, 1995). To more precisely understand one's level of cognitive competency (within the context of mental schema) it is necessary to examine the specific cognitive structure underlying such schema (Berlin, 1979). To do this, it is useful to develop a theoretical framework that a priori mirrors a presumed structure. Such frameworks typically consist of higher-order constructs and related concepts that, in turn, are related to specific, observable and measurable variables. Such concepts, constructs and variables are often ordered hierarchically with respect to their relative importance to decision making (Donaldson and Lorsch, 1984; Walton, 1986; Kahneman and Tversky, 1987).

Theoretical frameworks play important roles in the development of disciplines and understanding (Hunt, 1983). They are the primary means for organizing phenomena into classes or groupings that are amenable to systematic investigation. Moreover, the development of such frameworks typically involves the partitioning of complex phenomena into

categories that are homogeneous with respect to common underlying properties.

A procedure that has come to be recognized and accepted in the development of social science theoretical frameworks is "logical partitioning" (Hanson, 1958; Hemple, 1970). This procedure, also called "deductive classification," "a priori classification," or "classification from above," requires that a framework be developed before the researcher analyzes any specific set of data (hence the terms "deductive," "a priori," and "from above"). It is a theory-driven procedure and "presupposes a fairly sophisticated understanding of the phenomena being investigated. Without this disciplined approach, the classifications involved may be totally unrealistic; nothing better than an inspired guess" (Harvey, 1969:336; also see Sokal and Sheath, 1963).

In order to avoid this pitfall, the use of logical partitioning must involve a multilevel framework in which phenomena are logically sequenced such that higher-order "mental" constructs within a given framework are refined, and further defined by more specific second-order concepts. Such concepts are then further refined by observable and/or measurable variables that exist in our world (Greeno, 1966; Frank and Green, 1968; Gardenfors, 1980). Meaningful cognitive frameworks, developed through logical partitioning, contain mental representations of the world that are logically clustered such that the larger complexities of the world can be made parsimonious and thus better understood. These representations can be visually characterized as nodes that are linked with other nodes in an overall mental framework (Hemple, 1970; Dunn and Ginsberg, 1986; Rumelhart and Norman, 1988; Isabella, 1990; Langfor-Smith, 1992).

One presumed advantage of well-developed cognitive structures is efficiency in information processing and decision making (i.e., cognitive competency). A logical cognitive structure, based on the experience of experts in a given field, can serve as an interpretive lens and help decision makers select certain aspects of an issue as more relevant or more important than another. That is, if one can organize a somewhat disconnected array of stimuli into a coherent knowledge structure, then enhanced use of information is possible. In short, cognitive structures help us frame our world, order its parts, and make better decisions related to the complex realities that exist in the world (Norris, Jones and Norris, 1970; Stabell, 1978; Wacker, 1981).

A number of studies have demonstrated that cognitive organization of information is key to evaluating alternatives and, ultimately, to performance. Such studies have been conducted in widely differing

fields including competitive games/sports (chess, go, poker, baseball, Formula One racing), professional fields (nursing, salesmanship, computer programming, banking), foreign policy, child development, and leadership (see for example Chi and Ceci, 1987; Narayanan and Fahey, 1990; Krackhardt, 1990; Lord and Maher, 1991; Houghton and Hronsky, 1993). Logically, any area of decision making could be associated with a well-defined cognitive structure among experts in a given field of interest (Sillince, 1995). This includes decision making in the field of exporting. However, there is a dearth of studies focusing on cognitive structures in the field of exporting, particularly in regard to decision making related to export market evaluation (Wood and Robertson, 1997). Indeed, the literature calls for the development of an a priori theoretical framework related to the cognitive structure of export decision makers, to which subsequent analytical results can be compared (Wood and Robertson, 2000).

- *An export environment information framework*

To ascertain and then measure any cognitive structure, utmost care is required to insure that a framework purporting to represent such a structure is theoretically sound (Daniels, Chernatony and Johnson, 1995). To test the existence of a collective cognitive structure, it is most appropriate to use a "finely grained" specification of the most likely bits of information defined and used by the experienced individuals under study (Lohse, et al, 1994). In order to meet these criteria, and to address the first two research questions posed in this study, a two-step process that used both deductive and inductive methods was employed. First, an extensive literature search was undertaken. Second, a series of personal and focus group interviews were conducted. This data collection process led to the development of a comprehensive theoretical export information framework relevant to export market evaluation and cognitive structure evaluation. Subsequently, survey research was employed to "test" the framework and examine the relative importance of information contained within the framework among the relevant population.

As noted, both empirical and conceptual literatures related to *international marketing* (e.g., Litvak and Banting, 1968; Maclayton, Smith, and Hair, 1980; Werner, Brouthers, and Brouthers, 1996; Terpstra and Sarathy, 1997; Czinkota and Ronkainen, 1998), *exporting* (e.g., Neidel, 1971; Simpson and Kujawa, 1974; Raven, McCullough, and Tansuhaj, 1994; Albaum, Strandskov and Duerr, 1998; Leonidou and Katsikeas, 1998), *economic development* (e.g., Adelman and Morris, 1965; Sethi,

1971; Nagy, 1978; McConnell, 1995), *foreign direct investment* (e.g., Aharoni, 1966; Kobrin, 1976; Daft and Parks, 1988; Grosse and Kujawa, 1995), and other relevant areas were reviewed. The principle objective of this comprehensive literature review was to uncover (deduce) information of potential value to managers engaged in evaluating export markets. Based upon this review, approximately 200 "indicators" or foreign environmental "descriptor variables" relevant to analyzing export opportunity were identified. To qualify as a descriptor variable, a specific piece of information (for example, "import tariffs" in a given market) had to offer insight into an export market's potential for success or failure). The 200 descriptors resulting from the literature search were then further reviewed, reduced, and eventually refined through logical partitioning into a comprehensive export environment information framework that theoretically reflects the cognitive structure of experienced export managers.

The reduction of the original 200 descriptors was based upon sixteen personal interviews with representatives from government agencies, international banking institutions, and private business. In total, eight exporting experts were interviewed independently, each twice. Following the personal interviews, a focus group interview was conducted with all eight "key informants."

Each informant had extensive experience with exporters, the business of exporting and/or international trading. The interviews were conducted in both informal and formal settings and, on average, each lasted approximately two hours. The objective of these interviews was to identify (induce) variables both useful to, and utilized by, practicing managers engaged in export market evaluation. During the first set of interviews, each informant was asked to consider the pre-established 200 descriptors and then assemble them (partition them) into an information framework that, in theory, could represent the cognitive structure of exporters engaged in international market evaluation and selection analysis. Each informant was then asked to consider if an "experienced" export manager would be cognizant of the potential value of each specific piece of information under consideration

In the first set of interviews, informants were allowed to discard, combine, or adjust the language of each export market descriptor, as they deemed most appropriate. During the second set of interviews, each informant was shown the initial framework developed by the other key informants. They were then asked to reconsider their frameworks and to alter them based on any aspect of the other frameworks they believed would improve their first efforts. This two-step process resulted in a general con-

sensus among the eight experts of what should and should not be included in the framework, and how each piece of information should be expressed and represented. The focus group interview allowed all eight experts to discuss the information and build consensus regarding the framework.

Considerable effort was made to ensure that the final "consensus" framework included a broad selection of higher-order "primary" environmental constructs that were, in turn, refined by specific "secondary" export concepts, which were then further refined by specific observable and/or measurable export market "decision variables." All three levels of the structure were thus logically related. An important goal of this process was to make the framework as parsimonious as possible. This was important in order to effectively use the framework in the subsequent survey research so as not to overwhelm survey respondents with excessive information in the subsequent survey research. The eventual framework included a set of six primary environmental constructs, 17 secondary export concepts, and 60 specific export market decision variables, all potentially useful to export decision makers. This framework is presented in Table 1, which purports to capture the mental map of experienced exporters. The framework highlights, and then partitions six complex constructs representing the political, economic, market, culture, infrastructure, and legal environments faced by decision makers when evaluating alternative export markets.

Table 1
Exporters' Theoretical Framework/Cognitive Structure

Primary Environmental Constructs	Secondary Export Concepts	Export Market Decision Variables (Written Description Used in Survey)
(I) Politics	Stability	(1) Political strength of leadership in the foreign country.
		(2) Degree of freedom of the political opposition in the foreign country.
		(3 The degree of local labor unrest and the foreign government's ability to deal with the current and future labor unrest.
		(4) Degree of foreign country's domestic instability (e.g., rebellion, political kidnappings, riots, guerrilla wars).

Primary Environmental Constructs	Secondary Export Concepts	Export Market Decision Variables (Written Description Used in Survey)
	Diplomatic Relations	(5) Degree of normal diplomatic relations between U.S. and the foreign country and vice versa.
		(6) Extent of restrictions on free and open trade with the foreign country due to political frictions (e.g., U.S. freeze on U.S. technology exports).
	Internal Policies	(7) Extent of foreign government's use of incentives to encourage private business.
		(8) The ability of the foreign government to enforce its diplomatic policies with respect to trade (for example, ability of foreign government to enforce policy of limited trade with the U.S).
		(9) Actual size of the private sector in relation to the government sector in the foreign country.
(II) Market Potential	General Demand	(10) Potential foreign buyers' ability to pay for your product.
		(11) Average annual sales of your type of product or service in the foreign country.
		(12) Future trends and growth rate of the foreign market that your product or service would be sold in.
		(13) Opportunities for you to offset cyclical swings in the U.S. market demand for your product by entering a foreign market.
	Adaptation Costs	(14) Parts and technical service support needed and available for your product in the foreign country.
		(15) Need to change your product specifications due to differences in foreign buyers' tastes and preferences or technical requirements.

Primary Environmental Constructs	Secondary Export Concepts	Export Market Decision Variables (Written Description Used in Survey)
		(16) Degree of test marketing and promotion required to assure adequate sales of your product in the foreign market.
		(17) Credit and financing normally extended to buyers in the foreign country (i.e., industry standards for financing sales to a foreign market).
	Competition	(18) Types and number of competitive products on the market in the foreign country.
		(19) Competitors' market share, coverage, and growth rate in the foreign market.
		(20) Advantages and weaknesses of competitors in the foreign market (e.g., the uniqueness of competitor's product and facilities for distribution).
		(21) Price levels on competitive products as compared to your C.I.F. price (costs, insurance, and freight) in the foreign market.
(III) Economic Accomplishment	Development and Performance	(22) Gross National Product and per capita income in the foreign country.
		(23) Availability of U.S. dollar reserves in the foreign country.
		(24) Education and employment levels in the local foreign population.
		(25) Inflation rate over the past five years in the foreign country.
		(26) Trends in the foreign country's balance of trade (surpluses *vs* deficits).
	Production Strength	(27) The degree of use of modern, efficient methods in the creation of products and services in the foreign country (relative skill level of labor force).

Primary Environmental Constructs	Secondary Export Concepts	Export Market Decision Variables (Written Description Used in Survey)
		(28) Wealth of the foreign country in natural resources and the extent of their development.
		(29) The diversity and range of all products produced in the foreign country versus those imported.
	Consumption	(30) Per capita ownership of consumer goods in the foreign country (e.g., cars, computers, TV's, etc.).
		(31) Per capita food consumption in the foreign country.
		(32) Per capita energy consumption in the foreign country (e.g., oil, gas, coal).
		(33) Per capita industrial goods consumption (e.g., steel, cement, glass) in the foreign country.
(IV) Cultural Perspective	Cultural Unity	(34) Number of different cultural groupings, such as ethnic, religious, racial, and language groups found in the foreign country.
		(35) Extent of harmony or friction between different cultural groups in the foreign country.
		(36) Differences in life styles and customs of various groups in the foreign country.
	Cultural Differences	(37) Extent of adoption of American way of life in the foreign country.
		(38) Percent of the business community who speak English, and the extent of adoption of American business practices in the foreign country.
		(39) Preferences and prohibitions in the foreign country with respect to numbers, colors, shapes, sizes, and symbols on products and in promotion of products.

Primary Environmental Constructs	Secondary Export Concepts	Export Market Decision Variables (Written Description Used in Survey)
		(40) Differences between the U.S. and foreign views on the use of your product.
(V) Infrastructure	Distribution	(41) Costs and efficiency of transportation to the foreign country from the U.S. (airlines, shipping lines, etc.).
		(42) Costs and efficiency of transportation within the foreign country (roads, highways, railroads, trucking, etc.).
		(43) Costs and efficiency of physical handling and warehousing in the foreign country (in the port of entry and throughout the foreign country).
		(44) Extent of development of wholesale/ retail system in the foreign country.
	Communications	(45) Costs and efficiency of communications to the foreign country from the U.S. (telex, telephone, post office, telegraph).
		(46) Costs and efficiency of communications within the foreign country (i.e., commercial broadcast media, print media, promotional agencies).
		(47) Costs and efficiency of trade fairs and industrial exhibitions in the foreign country.
	Geography	(48) Total land area of the foreign country and description (i.e., mountain range, rivers, natural harbors, land locked).
		(49) Climatic characteristics in the foreign country.
		(50) Natural disaster potential in the foreign country (earthquakes, volcanoes, floods, windstorms).
(VI) Legal Perspective	Tariffs/Taxes	(51) Exact tariffs, import duties, and taxes assessed by the foreign country on your products.

Primary Environmental Constructs	Secondary Export Concepts	Export Market Decision Variables (Written Description Used in Survey)
		(52) Tariff concessions allowed by the foreign country (i.e., drawbacks, preferential tariffs).
		(53) Common markets or regional trading blocks to which the foreign country belongs.
	Non-tariff	(54) Product standards imposed by the foreign country (e.g., local assembly laws; product packaging and labeling requirements; local safety and environmental regulations).
		(55) Required documentation, import procedures, and quotas imposed by the foreign government.
		(56) Extent and nature of the foreign government's participation in trade (e.g., foreign government procurement policies).
	Other Legal	(57) Visa requirements in the foreign country (restriction on travel imposed by foreign government).
		(58) Foreign government's laws affecting relationships with agent's distributors (e.g., severance pay, compensation).
		(59) Laws regulating and restraining advertising and promotion in the foreign country.
		(60) Patent, copyright, and trademark protection in the foreign country.

Note in Table 1 that each of the 60 specific *export market decision variables* included in the framework is associated with one of the 17 *secondary export concepts* which are associated with one of the six *primary environmental constructs*. Again, each part of the framework is thought to have direct relevancy to the success or failure of an export venture and, therefore, each is potentially useful in guiding the export market evaluation and selection process.

To further illuminate the approach used to investigate the first two research issues posed previously, a brief overview of the framework and its parts is provided.

- *A proposed exporter cognitive framework – an overview*

Of the six primary environmental constructs[2] depicted in Table 1, *politics* is the first and contains three secondary export concepts and nine export market-decision variables. Based on both the literature and the interviews with exporting experts, the construct of politics, when contemplated from an export market evaluation perspective, focuses on *the extent to which the foreign government, through creation and administration of policy, has the trust and backing of its people, generates conditions conducive to international business activities, and is sensitive toward the private sector of the economy*.

A key question in the minds of export managers is whether the political environment that influences a given export market portends success or failure for the firm's exports. Three secondary export concepts further refine the construct.

1) Stability, or more specifically the nature of present and future political *stability*, in the export market as measured by the degree of centralization of political power, and both the extent of representation and the level of confidence of the people in their government.
2) The nature of diplomatic relations between the foreign government and home government and its anticipated (or realized) effect on trade.
3) The foreign government's internal policies, attitudes and actions toward private enterprise.

As shown in Table 1, nine specific export decision variables further refine these three concepts related to the political environment.

Market Potential is the second primary environmental construct listed in the framework and it contains three secondary export concepts and 12 export market decision variables. The construct of market potential focuses on *the extent to which a foreign country or region in a foreign country has an adequate demand for a business's product(s), whether the population has the means to purchase the imported goods and/or services, and if the competitive environment is conducive to market entry*.

There are two key questions in the minds of export managers regarding market potential. First, does the export market of interest have the necessary means to purchase imported products? And second, are the needs of the market currently unmet? Three secondary export concepts further refine this construct.

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2 The wording and cognitive focus of each of the six primary environmental constructs and seventeen secondary export concepts as described herein, represent the consensus of the eight exporting experts – "key informants" interviewed.

1) General demand or the opportunities for exporters due to the export market's current and future demand for goods or services and that market's ability to pay for such goods or services.
2) Adaptation costs associated with the product or service in the export market.
3) Competition, both internal and external, in the export market.

Table 1 shows the 12 specific export decision variables that further refine each of the three concepts related to market potential.

Economic Accomplishment is the third primary environmental construct in the framework. It contains three secondary export concepts and 12 export market decision variables. The construct of economic accomplishment focuses on *the nature of a foreign country's development as measured by broad economic performance standards and its level of production and consumption of goods and services.*

The key question here concerns the nature and extent of industrial and consumer evolution in a given export market. Three secondary export concepts further refine the construct.

1) Development and performance of the export market as measured by current broad economic standards or indicators.
2) Production strength within the export market in terms of its own ability to produce goods and services versus those imported.
3) Consumption trends, of both consumer and industrial goods, in the export market.

Again, as shown in Table 1, twelve specific export decision variables further refine each of these three concepts related to economic accomplishment.

Cultural Perspective is the fourth primary environmental construct within the framework. It focuses on *the similarities and differences within a foreign country's population with respect to commonly shared lifestyles, customs and social relationships. It also reflects the degree of cultural correspondence and disparity between the home country and foreign country and the resulting opportunities and challenges for trade.*

The key question for exporters here is the effect of cultural harmony (or lack thereof) on the success (or failure) of an export venture. The following two secondary export concepts further refine this construct.

1) Cultural unity and national integration, and the degree of ethnic and cultural differences in the export market.

2) Cultural differences (distance and similarities) between the export market and the home market (in this case, the U.S. domestic market).

As shown in Table 1, seven specific export decision variables further refine these two concepts.

Infrastructure is the fifth primary environmental construct in the framework. It focuses on *the opportunities and challenges to the realization of international business operations presented by a foreign country's infrastructure (communications and physical distribution), land formations, and climatic conditions.*

The key question regarding infrastructure is the extent to which export operations are affected by fundamental business foundations that exist in a given export market. Three secondary export concepts further refine this construct.

1) The extent and nature of the export market's physical distribution infrastructure.
2) The extent and nature of the export market's communications infrastructure.
3) Geographic and climatic conditions that may affect the business enterprise in the export market.

As seen in Table 1, ten specific export decision variables further refine these three concepts.

The sixth and final primary environmental construct is Legal Perspective. It contains three secondary export concepts and 10 export market decision variables. This construct focuses on *the foreign country's laws, regulations, and practices that prevent or restrain e*xisting business activities and imports.

For exporting managers, the key question is whether the export market's laws and regulations will help or hinder export efforts. Three secondary export concepts further refine this construct: (I) Tariffs and taxes in the export market. (II) Non-tariff barriers of the export market. (III) Other legal considerations besides tariff and non-tariff barriers (e.g., visa requirements, laws affecting agents, intellectual property protection).Ten export decision variables further refine these concepts (Table 1).

Taken together, the six primary environmental constructs, the 17 secondary export concepts, and the 60 specific export decision variables define and refine the proposed cognitive framework used by decision-makers engaged in export market selection. In this study, statements reflecting each of the 60 specific export market decision variables were

presented in a questionnaire. A sample of export managers was then asked to evaluate each statement/variable in terms of its relative importance to their exporting decision. A five-point likert rating scale was provided, with the two anchors labeled as (1) this information is extremely important to me in making a decision to export to a foreign market, and (5) this information is unimportant to me in making a decision to export to a foreign market. A "don't know/no opinion" response category was also provided for each of the 60 export market decision variables. Survey results based on the data gathered from the questionnaire provide initial answers to the first and second research issues posed in this study.

- *Export market orientation and export success*

The study's third research question addresses the degree which being proactive and systematic in evaluating export markets (i.e., export orientation) is associated with export outcomes and exporters' expectations regarding international market success. While experience may lead to enhanced abilities to logically examine one's world and hierarchically array information related to one's world (i.e., having a well developed cognitive structure), it is perhaps the degree to which such abilities are proactively and systematically used that, more often than not, determines an organization's success or failure (Miller, 1987; Mintzberg, 1990).

The success (or failure) of organizations operating in domestic business environments has been linked to management's "orientation" or the importance that managers place on demand and trend analysis and the extent to which managers methodically and thoroughly analyze market opportunities (Gabarro, 1973; Hrebiniak, 1978; Knight, 1995; Lawrence and Lorsch 1967; Miles et al, 1978). Likewise, researchers have noted the influence of systematic analysis on management's performance expectations within their organizations (Kohli and Jaworski, 1990; Lee and Brasch, 1977; Miller, 1987; Mintzberg, 1990). The issue at hand in the present study is the degree to which these findings hold true in an exporting context. Do proactive and systematic approaches toward exporting, in the context of export market information use, correlate with export performance and managers' expectations of export performance? To examine this question, study participants were queried as to - (1) the degree to which they kept track of demand trends and other developments in foreign markets, and (2) the systematic "depth" to which they analyzed foreign markets. Participants also responded to three questions that reflected their current export success and future outlook with re-

spect to exports, including (1) the percentage of total sales generated from exporting, (2) their outlook regarding future export sales, and (3) perceived "promise" of export markets.

- *The empirical study - sample selection and response rate*

In order to examine the research issues posed in this study, a sample of "experienced" exporters (those with adequate background and exposure to the environment of export markets) was required. As such, a judgmental sample of 275 exporting companies in the Northwestern part of the United States was selected to represent established organizations whose managers make export market selection decisions. These companies were selected based upon the judgment of seven international business experts (three from the government sector and four from the international banking sector of the region) who worked closely with exporters in the area. For each company selected, a manager who had direct responsibility for his or her company's exporting activities was identified. Selected companies represented 22 different Standard Industrial Codes (SIC). SIC groups represented in the sample are reported in Table 2.

The exporting manager identified at each of the 275 companies was sent an introductory letter explaining the purpose of the research and requesting participation in the study. One week later, the actual questionnaire, along with a cover letter reiterating the purpose and request for participation, was sent to each manager. A final reminder letter requesting participation was sent to each manager two weeks later. Completed questionnaires were received from 137 of the 275 exporting firms selected. Since 14 selected companies were no longer in business, the effective response rate was approximately 52 percent (i.e., 137 responses from a universe of 261 firms). A random subsample of non-responding companies was contacted by telephone in order to identify possible differences between respondents and non-respondents (Dillman, 1978). This analysis of non-responding firms indicated that any non-response bias present in the study was negligible as no significant differences were found between the two groups (0.01 level).

Table 3 displays respondents self-reported titles or positions held. As shown, the majority are key decision makers within their organizations. As such, study results can be assumed to represent key managerial decision makers (and not lower-level clerical staff). Survey data also

Table 2
SIC Groups Represented by Selected Organizations and Self-Reported Title

SIC Group	Number of Companies In Sample
Agricultural Products - Crops	8
Heavy Construction Contractors	1
Food and Kindred Products	19
Textile Mill Products	1
Apparel and Other Textile Products	3
Lumber and Wood Products	50
Paper and Allied Products	4
Printing and Publishing	6
Chemicals and Allied Products	3
Rubber and Miscellaneous Plastic Products	2
Leather and Leather Products	2
Stone, Clay, and Glass Products	2
Primary Metal Products	6
Fabricated Metal Products	12
Machinery Except Electrical	57
Electric and Electronic Equipment	11
Transportation Equipment	10
Instruments and Related Products	19
Miscellaneous Manufacturing Industries	7
Transportation by Air	2
Business Services	3
Engineering and Architecture	3
Errata	4
Not Classified	40
Total Companies	275

indicated the majority of respondents are experienced exporters,[3] who play a key role in export decision making,[4] and who are committed to future exporting activities.[5]

3 71 percent of respondents had more than five years of exporting experience.
4 79 percent of respondents indicated that they regularly analyzed export opportunities for their company.
5 More than 60 percent of respondents expected more than 20 percent of their firms' sales to come from exporting in the next two years.

Table 3
Position of Respondents

Title / Position	Number of Respondents
President	34
VP Marketing	19
Marketing Manager	19
Export Manager	15
Sales Manager	14
General Manager	12
Chief Executive Officer	3
International Sales Engineer	3
Chairman	2
Owner	2
Marketing Assistant	2
Operations Manager	1
Corporate Secretary / Editor	1
Customer Service Manager	1
Manager Seminar Department	1
Senior Market Analyst	1
Purchasing Manager	1
Secretary Treasurer	1
Administrative Assistant	1
No Title Reported	3
Total	137

- *Data analysis*

To investigate the first two research questions posed in this study, survey data were evaluated using both factor analysis and analysis of variance (followed by Tukey, Bonferroni and Scheffe tests for differences in rank order). To investigate the third research question of this study, Pearson correlation analysis was performed with a select set of dependent and independent variables.

More specifically, in order to examine exporters' perceptions of foreign market information (again, to examine the first two research questions), Principal Components Analysis with Varimax Rotation and Kaiser Normalization were employed. This technique allows constructs to be derived from raw attributes by reducing a collection of initial variables

to a smaller number of conceptually meaningful dimensions related to an issue of study (Nunnally, 1967); in this case, the export environments faced by experienced decision makers.

One problem in using this technique with the full 60-item list of decision variables is that, with the study sample size being 137 exporters, the criterion of having a minimum "subject-to-variable ratio" of five-to-one recommended in the literature is not met (Hair, et al, 1979). To achieve a higher subject–to-variable ratio, an iterative process (also recommended by Hair, et al,) was employed. Specifically, after each iteration of the factor analysis, only those decision variables with factor loadings of .50 or higher were retained. Thus, each iteration had a smaller number of decision variables being factor analyzed. Nine iterations were performed until a subject-to-variable ratio of approximately five-to-one was achieved. This process also eliminated those decision variables that were either conceptually redundant or tended to load randomly.

The task of selecting the appropriate number of factors to use in this analysis is, by nature, somewhat subjective. However, utilizing several "rules of thumb" suggested in the literature (Hair et al, 1979; Aaker, 1981), including (a) interpretability and theory and (b) Eigenvalues greater than 1.0, six factors containing 27 decision variables were retained (see Table 4).

Table 4
Factor Analysis Results

	Factor Loadings					
Specific Decision Variable:	**F1**	**F2**	**F3**	**F4**	**F5**	**F6**
1) The degree of local labor unrest and the foreign government's ability to deal with current and future labor unrest.	0.74	0	0	0.11	0.3	0.18
2) Degree of freedom of political opposition in the foreign country.	0.72	0	0.24	0	0.12	0.29
3) Natural disaster potential in the foreign country (earthquakes, volcanoes, floods, windstorms).	0.69	0	0.22	0.19	0	0

	Factor Loadings					
Specific Decision Variable:	**F1**	**F2**	**F3**	**F4**	**F5**	**F6**
4) Political strength of leadership in the foreign country.	0.67	0.1	0	0.27	0.16	0.15
5) Laws regulating and restraining foreign country; advertising and promotion in the foreign country.	0.58	0.28	0.2	0.12	0	-0.23
6) Number of different cultural groupings, such as ethnic, religious, racial, and language groups found in the foreign country.	0.58	0	0.42	-0.13	0	0.16
7) The ability of the foreign government to enforce its diplomatic policies with respect to trade (for example, ability of the foreign government to enforce policy of limited trade with the U.S.).	0.56	0.24	0	0.26	0.19	0
8) Degree of normal diplomatic relations between the U.S. and the foreign country and vice versa.	0.54	0	0	0.46	0.19	0
9) Advantages and weaknesses of competitors in the foreign market (e.g., the uniqueness of competitor's product and facilities of distribution).	0.11	0.8	0	0	0	0.11
10) Competitors' market share, coverage, and growth rate in the foreign market.	0	0.74	0	0.14	0	-0.1
11) Type and number of competitive products on the market in the foreign country.	0	0.73	0.18	0.16	0.11	0
12) Need to change your product specifications due to differences in foreign buyers' tastes and preferences or technical requirements.	0.33	0.66	0	0	-0.19	0.21

	Factor Loadings					
Specific Decision Variable:	**F1**	**F2**	**F3**	**F4**	**F5**	**F6**
13) Average annual sales of your type of product or service in the foreign market.	0.1	0.58	0.21	0.15	0.24	0
14) Future trends and growth rate of the foreign market that your product/service would be sold in.	0.1	0.53	0	0.38	0.26	0
15) Extent of development of wholesale/ retail system in the foreign country.	0.12	0.25	0.69	0.13	0	0
16) Per capita food consumption in the foreign country.	0.15	0	0.63	0.22	0.11	-0.1
17) Per capita ownership of consumer goods in the foreign country (e.g., cars, radios, TV's).	0.26	0	0.61	0	0.26	0
18) Extent of adoption of the American way of life in the foreign market.	0	0	0.58	0	0.12	0.47
19) Required documentation, import procedures, and quotas imposed by the foreign government.	0.2	0.24	0	0.66	0	0.28
20) Costs and efficiency of transportation to the foreign country from the U.S. (airlines, shipping lines, etc.).	0	0.1	0.37	0.65	-0.17	0.13
21) Credit and financing normally extended to buyers in the foreign country (i.e., industry standards for financing sales to a foreign market).	0.18	0.1	0.11	0.58	0.1	0
22) Extent and nature of foreign government's participation in trade (e.g., foreign governments procurement policies).	0.23	0.21	0	0.5	0.19	0.42

	Factor Loadings					
Specific Decision Variable:	**F1**	**F2**	**F3**	**F4**	**F5**	**F6**
23) Wealth of the foreign country in natural resources and the extent of their development.	0.11	0.1	0.1	0.1	0.81	0
24) Per capital energy consumption in the foreign country (e.g., oil, gas, coal).	0.36	0	0.15	0	0.62	0
25) Gross National Product and per capita income in the foreign country.	0.19	0.19	0.43	0	0.61	0
26) Cost and efficiency of communications to the foreign country (e-mail, telephone, post office, other mail).	0	0	0.14	0.26	0	0.76
27) Visa requirements in the foreign country (restrictions on travel imposed by foreign government).	0.35	0	0	0.24	0.14	0.66
Eigenvalues	14.92	3.12	2.58	2.05	1.87	1.79
Cumulative Variance %	29.80%	36.10%	41.20%	45.30%	49.10%	52.60%
Standardized Alpha Values	0.8389	0.7781	0.6648	0.6702	0.7712	0.6075

Extraction method: Principal Components Analysis. Rotation method: Varimax with Kaiser Normalization (rotation converged in nine iterations).

[1] Environmental Forces present in an export market.
[2] Market Forces present in an export market.
[3] Consumption Forces present in an export market.
[4] Structural Forces present in an export market.
[5] Wealth in an export market.
[6] Communication/Relationship Forces in an export market.

In order to examine the significant differences between the six factors retained and provide insight into the second research issue posed in this study, the mean ratings of all decision variables corresponding

to a specific factor were summed and an average importance rating was derived for each factor (e.g., for Factor 1, mean raw scores for decision variables one through eight were added and then divided by eight. Each factor's average importance rating was computed as variable 1 + variable 2 + … variable n/n). Table 5 displays the results of this analysis along with the corresponding results from the analysis of variance (ANOVA) and tests for differences in rank order (Tukey, Bonferroni and Scheffe tests).

Table 5
Export Environmental Constructs Derived from the Factor Analysis: Average Importance Rating, ANOVA and Multiple Comparison Test Results

Environmental Constructs (Factors)	Mean Importance Rating	Standard Derivation	Rank Order of Importance
Sub-group # 1 (1)			
F2 - Market Forces	2.03	0.97	1
F4 – Structural Forces	2.19	1.06	2
Sub-group # 2 (2)			
F6 – Communication- Relationship Forces	2.95	1.4	3
F1 - Environmental Forces	3.09	1.35	4
F5 - Wealth	3.14	1.48	5
F3 - Consumption Forces	3.26	1.42	6

(1) Null hypothesis- all mean values are equal, ANOVA test results, F = 43.76, Sig. .000 level (hypothesis rejected).

(2) Multiple comparison tests - Tukey, Bonferroni, Scheffe results indicate sub-group #1 (F2 and F4) is significantly different from sub-group #2 (F6, F1, F5, and F3) at .05 level.

(More specifically, Tukey, Bonferroni and Scheffe tests for differences in rank order indicate that the first two dimensions (Market Forces and Structural Forces) are significantly different from the last four dimensions (Relationship Forces, Environmental Forces, Wealth and Consumption forces). Thus results indicate two sub-groups of dimensions exist that are homogenous within (F2 and F4 are not significantly different from each other, and F6, F1, F5 and F3 are not significantly different from each other), and heterogeneous between (subgroup #1 - F2 and F 4 is significantly different from subgroup # 2 - F6, F1, F5 and F3).

Finally, to address the third research issue of this study, participants responded to two questions that reflected their export market orientation (i.e., the degree to which they proactively kept track of trends in foreign markets, and the degree to which they systematically analyzed foreign export markets), and three questions that reflected their current success and future outlook with respect to exports (i.e., percentage of total sales generated from exporting, expectations of future export sales, and perceived "promise" of export markets). Table 6 shows the results of this analysis.

- *Results*

The original 60 variables were reduced to 27, with six factors emerging. As shown in Table 4, the six factors capture 52.6% of the variance common to the 27 variables retained, and each factor has an Eigenvalue greater than one. Note also that all 27 variables load highly on only one factor (i.e., factor loadings were not "split" between two or more factors). These results provide initial evidence of a reasonably focused cognitive structure on the part of participating exporters with respect to their perceptions of information associated with export market evaluation.

Interpretation of a factor in terms of its underlying meaning or conceptual content is, by necessity, subjective. Typically, the meaning of a factor, and subsequent label, is inferred from those variables that load high on a given factor, while also having relatively low loadings on the remaining factors (Aakar 1981). For purposes of clarity, the highest factor loading corresponding to any given variable has been highlighted in bold for each of the six factors derived from the data analysis (see Table 4). Factor 1 contains eight variables with loadings ranging from 0.74 to 0.54. Information corresponding to these variables relate to the macro environmental realities that can influence any given export market, including labor unrest (V1), political freedom and strength (V2, V4), natural disasters (V3), legal constraints on business (V5), ethnic, religious, racial and language groupings (V6), and diplomatic policies and relations (V7, V8). Here, the underlying issue for exporters appears to be whether the macro environmental forces in a given market, as represented by labor, politics, natural disasters, laws, diplomacy and population profiles, are conducive to export success. Factor 1 is therefore labeled *Environmental Forces* present in an export market.

Factor 2 contains six variables with loadings ranging from 0.80 to 0.53. Information corresponding to these variables relates to specific market realities facing exporters, including competition (V9, V10, V11),

Table 6
Export market orientation proactive/systematic.
Use of information and relationship to export success

	Pearson Correlation (Significance 2-tailed in parenthesis)	
	The importance in your firm of keeping track of demand trends and other changes in foreign markets (extremely important to unimportant) (1)	The nature and extent of your firm's involvement in analyzing foreign markets (never to extensive) (2)
A. 2 to 3 years from now what percentage of your total Dependent Variables (export success - real and perceived) sales do you realistically expect to come from exports? (3)	0.290 (0.003)	0.339 (0.000)
B. What percentage of your total annual sales for last year was generated from exporting? (4)	0.184 (0.041)	0.287 (0.001)
C. Which of the following areas holds the most promise as an export market (count of responses) (5)	0.179 (0.043)	0.060 (0.058)

Notes:

(1) Respondents were asked to indicate how important "keeping track of demand trends and other changes in foreign markets" was in their firm's decision to export (1=extremely important, 5 = unimportant).

(2) Respondents were asked to respond to the question "Our firm analyses foreign market export potential," - 1 = regularly, with respect to both new markets we don't export to, and with respect to current markets, 2 = regularly, but only with respect to foreign markets we are currently exporting to, 3 = only if we receive an export inquiry, 4 = only if we receive an export order, 5 = never.

(3) Response categories included - 1 = 20%+, 2 = 16 - 20 %, 3 = 11 - 15 %, 4 = 6 - 10%, 5 = 1 - 5%, 6 = 0%.

(4) Response categories included - 1 = 20%+, 2 = 16 - 20 %, 3 = 11 - 15 %, 4 = 6 - 10%, 5 = 1 - 5%, 6 = 0%.

(5) Respondents were asked to indicate which of the following areas held the most promise as an export market for their firm (options included - Canada, Latin America and/or Caribbean, Western Europe including Great Britain, Russian and or Eastern/Europe, China, Middle East, Africa, Asia and the Far East (excluding Japan and China), Japan, Australia and/or New Zealand). Respondents were asked to indicate as many areas as were appropriate for their firm.

buyers' tastes, preferences and technical requirements (V12), and the current and potential future sales in a given market (V13, V14). Here, the underlying issues for exporters appear to be - (1) the state of competition in an export market, and (2) whether there is sufficient demand for goods and/or services in the market. Factor 2 is labeled *Market Forces* present in an export market.

Factor 3 contains four variables with loadings ranging from 0.69 to 0.58. Information corresponding to these variables appears to relate to specific consumption and ownership of products by potential customers (V16, V17), the wholesale and retail systems that are in place to provide customers with products (V15), and the similarities of customer lifestyles (consumption and other) to those of Americans (V18) in a given export market. The underlying issue for exporters here is focused on the nature and structure of individuals' consumption patterns as they relate to the export offerings. Factor 3 is labeled *Consumption Forces* present in an export market.

Factor 4 also contains four variables with loadings ranging from 0.66 to 0.50. Information corresponding to these variables appears to relate to the structure (both public and private) that is in place to support exports entering a foreign market. Here, it is the systemic realities facing exporters, including required documentation (V19), cost and efficiency of export transportation systems (V20), credit and financing systems affecting exports (V21), and foreign governmental involvement in trade (V22), that are of interest. The underlying issue that appears to be embedded in this dimension is determining whether the public/governmental and private systems and structures that are in place support or hinder exporting activity. Factor 4 is labeled *Structural Forces* present in an export market.

Factor 5 contains three variables with loadings ranging from 0.81 to 0.61. Information corresponding to these variables relates to the overall wealth and long-term viability of an export market, as measured by natural resources and their development (V23), per capita energy consumption (V24), and gross national product and per capita income (V25). Here the underlying issue for exporters appears to be the overall wealth in the markets under investigation. Factor 5 is labeled *Wealth* present in a given export market.

Factor 6 contains two variables with loadings of .76 and .66 respectively. Here the ability to communicate with export markets and foreign buyers using e-mail, telephone and other services (V26), and the ability to travel and build face-to-face relationships with export markets and foreign buyers (V27), are of interest. The underlying issue appears to be

the extent to which exporters can communicate and build relationships within a given export market. Factor 6 is labeled *Communication/Relationship Forces* present in an export market.

These results indicate that the cognitive framework developed in this study (i.e., the six environmental constructs articulated in Table 1) was extractable. While the numerical dimensionality of the framework appears sound, results of the factor analysis shown in Table 4 indicate that the nature of the six environmental constructs, as represented by clustering of related variables, does vary from the originally hypothesized structure (Table 1). However, the exporters in this study do appear to manifest a cognitive structure that is interpretable, logical and grounded in the realities manifest in export markets. Therefore, in an exploratory sense, respondents in this study provide preliminary evidence that like experts in other fields, experienced exporters' do have coherent "mental maps" of their professional world with respect to export market information.

As shown in Table 5, the second research issue posed in this study is also supported, as there is evidence that experienced exporters value export market information hierarchically. Table 5 lists the rank order of the factors retained in the previous analysis (Table 4) and provides evidence of significant differences of mean values within and between such factors. ANOVA results indicate that the test for equality of means of all six dimensions (factors) is rejected (F = 43.76, Sig. .000). Further, Tukey, Bonferroni and Scheffe results indicate that two subgroups of the six factors are apparent. Specifically, Factor 2 and Factor 4 form the *first sub-group* as their mean values are not significantly different from each other. Factor 1, Factor 3, Factor 5, and Factor 6 form the *second subgroup* (again, there were no significant differences between the means of these dimensions). Subgroup 1 and Subgroup 2, however, are significantly different from one another (.05 level).

In regard to Subgroup 1, Factor 2 (which focuses on issues concerning - "does the market have sufficient demand for my product and/or service," and "what is the state of competition in this market?") is labeled "*Market Forces*." *Factor 4* (which focuses on the issue of – "what public/governmental and private systems or structures are in place to support (or hinder) exports of my products?") is labeled "*Structural Forces*." As shown by the rank order of importance (Table 5), this first subgroup of export dimensions represents the most important issues to be addressed by the exporters studied here as they consider different foreign market options.

Subgroup 2 has four factors. As shown, the first - Factor 6 (which focuses on the ability to physically and/or virtually get oneself into an

export market - "can I get a visa?", and "can I communicate with the market, using e-mail, etc?", "can I communicate and build relationships with a given export market?") is labeled "Communications/Relationship Forces." Subgroup 2 next includes Factor 1 (which deals with the issue of "can I stay in the market or will labor unrest, politics, natural disasters, laws, diplomacy and population profiles hinder my efforts?") is labeled "Environmental Forces." Next is Factor 5, labeled "*Wealth*." Here the issue concerns the "state of overall wealth in the export markets under investigation." This issue relates to levels of natural resources, energy consumption, and GNP, each of which can affect long-term export success and failure. Finally, Subgroup 2 includes Factor 3 (here the central issue is - "to what degree is the market developed," and more to the point, "to what degree is it developed like the U.S. market?"). This factor is labeled "Consumption Forces." In general, this factor captures the degree to which a given market is reflected in consumption, distribution patterns, and lifestyles of the consumers in a given market.

These results show that experienced exporters value export market information hierarchically. And, more specifically, they demonstrate two sets of sequential issues confronting exporters as they evaluate markets (Subgroup 1 and Subgroup 2, respectively). The first set of issues is summarized in the following questions.

- Does a given export market truly exist?
- Is the competition in that market at a level such that my firm can have a reasonable chance of succeeding in this market?
- Can I get into a given export market or will the government or other structural impediments prevent my firm from succeeding in this market?

Only if these questions are answered in the affirmative, do exporters move to a second set of issues represented by the following questions.

- Can I communicate with and build relationships in a given export market?
- Can I stay in this market or will environmental forces drive me out?
- Will the market be here in the long run (i.e., is there sufficient wealth in this market)?
- Is the market sufficiently developed in terms of structure, customer consumption patterns and preferences such that my products will survive and thrive?

Table 6 displays the results supporting the third and final research question of this study, which is whether experienced exporters, who tend to be proactive and systematic in their approach to export opportunity evaluation (export market orientation), also tend to be more successful in their current export endeavors and more optimistic with respect to their future export endeavors. Table 6 shows results of the correlation analysis undertaken to examine the association between three dependent variables (measuring export success – real and perceived) and two independent variables (measuring degree of proactive and systematic use of information). Results indicate that five of the six correlations are significant (< .05, correlations shown in bold), providing initial exploratory evidence that export market orientation and subsequent exporting success are related. In all cases except one, the more respondents indicated (1) they kept track of demand and other changes in foreign markets and (2) they analyzed foreign markets extensively, the higher their export sales as a percent of total sales, the greater their expectations of future exports, and the more perceived promise of export markets.

■ *Conclusions*

In order to investigate the cognitive competencies of exporters faced with decisions concerning foreign market evaluation and selection, related literature recommends the development of a theoretically-grounded framework focusing on information and its organization (Goodman, 1968; Goldman, 1993; Sillince, 1995). Such a structure can provide insight into how exporters mentally frame and value information related to international markets, and the degree to which they have developed mental competencies with respect to export market evaluation.

This study has presented and empirically tested such a framework in order to explore the first two of three research questions posed. First, do experienced exporters manifest a cognitive structure related to export market selection that is logical and theoretically grounded? Second, do experienced exporters value export market information hierarchically? As noted previously, while experience may lead to enhanced abilities to logically examine one's world and hierarchically array information related to one's world (i.e., having a well developed cognitive structure), it is perhaps the degree to which such abilities are proactively and systematically used that, more often than naught, determines an organization's success or failure (Miller, 1987; Mintzberg, 1990). Based on these considerations, a third research questions was also investigated in this study, namely - do experienced exporters, who tend to be proactive

and systematic in their approach to export opportunity evaluation, also tend to be more successful in their current export endeavors and more optimistic with respect to their future export endeavors?

Results of the factor analysis, analysis of variance and sub-group analysis indicate that the first two questions can be answered affirmatively, at least with respect to the sample of exporters examined in this exploratory study. Similarly, results of the correlation analysis support a preliminary positive response to the third research question. While this study's findings as to the existence of plausibly organized and hierarchical mental structures of information related to the export environment provide meaningful insights for a variety of groups (such as prospective exporters, advisors to exporters, and others), findings with respect to the third research issue lends credibility to this area of study. Specifically, findings provide preliminary evidence that proactive and systematic use of information, presumably embedded in the framework developed herein, is related to export success.

The results presented in this study have a number of implications for business practitioners. The information framework developed and examined here provides a conceptual scheme useful to both experienced and inexperienced exporters. The information displayed in Tables 1, 4 and 5 offer initial guidance to those faced with export market evaluation and selection decisions.

Banks, export management companies, government agencies and other types of export intermediaries could also use the framework and findings of this study as a benchmark for gathering export market information for their constituencies. By arraying large amounts of information relative to export opportunities in a parsimonious evaluation scheme (similar to that presented in this paper), facilitators of exporting can add value to their clients' export undertakings.

Like any exploratory research, this study has limitations. First, its scope is narrow. Additional investigations among other samples of exporters from other U.S. regions and other world areas are needed. A multinational study, incorporating experienced exporters from different cultures could add external validity to the finding presented here, or could provide evidence that exporter cognitive structures vary by country and/or culture. In addition, replication of the study with a sample of less experienced exporters would provide insight into the degree to which exposure to the export market environment begins to influence the development of a meaningful cognitive structure.

Examinations of the cognitive structure held by specific groups of exporters representing specific industries and goods/services classes

would be useful. Such work would enhance our understanding of the key issues behind exporters' information evaluation and valuation. Future work investigating the influence of teams of export decision-makers within firms, and their collective evaluation and valuation of the export information, would also shed light on this important area of business decision making. More advanced measures (beyond those exploratory ones presented here) that capture the details of information use, both proactive and systematic, are needed and would provide additional insights into this area of study. As such, the results presented here should be taken only as an initial examination of one aspect of exporting-namely, experienced exporters, like professionals in other fields, appear to logically array environmental information into a coherent structure that contains dimensions that are ordered in an "importance" hierarchy. And such exporters, who proactively and systematically analyze export markets (presumably using information contained in their cognitive structures) tend to be more successful and expect more success in their exporting endeavors.

Friedman (2000) states that understanding the incredibly complex system of global business requires one to look through a "multi-lens perspective… and do information arbitrage (p. 19)." He explains the nature and importance of information arbitrage in international business by stating that, to be effective in a foreign environment, one has to learn how to "weave" a comprehensive picture of opportunities (and challenges) from disparate pieces of information. International business success comes with the insightful structuring of information that allows for comparative evaluation. This study, by focusing on the mental competencies of experienced exporters and their "arbitrage" of such information, provides a starting point for understanding such evaluation.

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