

# EXPORT MARKET ORIENTATION, INTERFIRM COMMUNICATION, INTERFIRM COOPERATION AND EXPORT PERFORMANCE

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## ABSTRACT

*The purpose of this study is to assess the role of export market orientation on interfirm communication and interfirm cooperation, and ultimately, on export performance. Drawing upon the resource-based view, cognitive structures in social psychology, and relationship marketing theory, a conceptual model is developed and relationships between the key constructs are tested empirically from a diverse sample of 242 exporting firms in Thailand. Structural equation modeling was used to analyze the data. The findings indicate that highly export market-oriented firms engage in higher levels of communication frequency and communication quality. However, while communication quality is related to cooperation, communication frequency is not. These results have significant theoretical implications for academics of international business and marketing, as well as practical implications for exporters.*

**JEL:** L1, M1, M3

**KEYWORDS:** Export Market Orientation, Exporters, Communication Frequency, Communication Quality, Interfirm Cooperation, Emerging Market

## INTRODUCTION

Exporting is a key activity in most economies, particularly in emerging markets. Many academics and practitioners have encouraged exporting firms to become more market oriented so as to develop the necessary organizational capabilities that can lead to better knowledge of export markets. In addition, with the emergence of the relationship marketing paradigm, relational behaviors of the exporter-importer dyad have been given a significant amount of academic attention in the past decade (e.g. Lages, Lages and Lages, 2005; Lages, Silva and Styles, 2009; Nguyen and Nguyen, 2010; Racela, Chaikittisilpa and Thoumrunroje, 2007). However, although valuable insights have been gained from such prior studies, there has been very limited attention given to relationship determinants, such as those relevant to interfirm communication.

Communication has long been recognized as a relational driver in seller-buyer relationships (Griffith, 2002; Palmatier, 2008). Yet, much of the relationship marketing research literature has downgraded the role of communication to a minor component of relational behaviors. There is prior research to suggest that interfirm communication serves as a primary driver to sustaining business relationships, with empirical support found from studies conducted in manufacturer-retailer contexts (e.g. Holden and O'Toole, 2004), industrial marketing settings (e.g. Denize and Young, 2007) and business partnerships (e.g. Gray, 2005). Consideration of interfirm communication in export market ventures has only recently been posited in the international marketing literature (e.g. Oh and Moon, 2010). Thus, a deeper understanding of the communication—relationship behavior link in an exporter-importer context would be worthwhile, especially since engaging in such behaviors may involve considerable organizational resources.

This paper aims to fill this void in the marketing literature by examining the role of interfirm communication and relational behaviors in the export market orientation—export performance relationship. Although the export marketing literature has identified numerous relationship constructs (e.g. Leonidou and Kaleka,

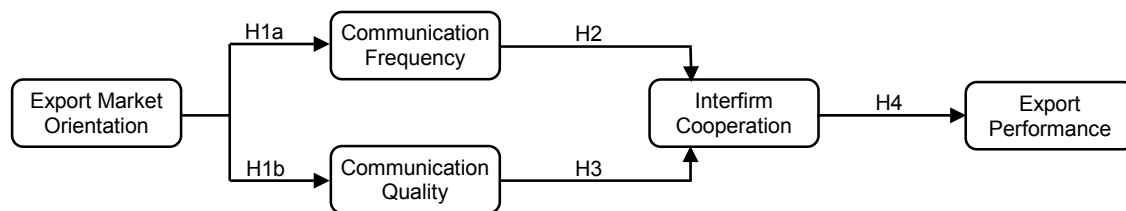
1998; Sutton-Brady, 2001), we specifically focus on examining the role of communication quality, communication frequency and the relational aspect of interfirm cooperation. Our selection of these behaviors is based on their noted significance in the existing literature, and the sparse attention they have been given in the exporter-importer business relationship. The context of this study is Thailand, an emerging market which is highly export-dependent. The country’s exports account for roughly two-thirds of the nation’s GDP. As a result of the global economic slowdown that began around mid-2012, Thailand’s export growth from January-August 2013 reached a mere one percent, well below the target of 7.0-7.5 percent (Sriring and Thaicharoen, 2013). Given the importance of the export sector to Thailand’s growth and the challenges Thai exporters face under a dynamic and fast changing global environment, this study is not only timely, but also provides valuable insights into firm resources and behaviors that influence the export performance of Thai firms. Thus, our study contributes to the international marketing literature in two major ways. First, it delineates the concept of communication from that of relationship, in line with a more detailed perspective of the two distinct sets of behaviors. Second, our study empirically examines the effects of communication and relational behaviors, which have received little attention in the export market orientation literature.

In the next section, we present a review of the relevant literature as well as the theoretical foundations applied for the development of the conceptual model and the corresponding hypotheses. These are followed by the research methodology and empirical analyses. Finally, the implications, limitations and directions for future research are discussed.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The development of the conceptual model shown in Figure 1 takes an interdisciplinary approach, integrating several different theoretical perspectives, namely the resource-based view (RBV) of the firm, cognitive structures from social psychology, and relationship marketing theory. The model conceptualizes exporter market orientation as an antecedent of communication frequency and communication quality, which then lead to interfirm cooperation that in turn affects export performance.

Figure 1: Conceptual Model



*This figure shows the conceptual model, key concepts, and hypothesized relationships that are of interest in this study. The model is developed from an integration of three theoretical perspectives, namely the resource-based view of the firm, individual cognitive structures, and relationship marketing theory.*

### Export Market Orientation

Export market orientation refers to the activities that firms perform in their efforts to incorporate the marketing concept into their export operations (Cadogan, Kuivalainen and Sundqvist, 2009). Behaviors that are associated with an export market orientation include export-focused intelligence generation, intelligence dissemination, and responsiveness to export market intelligence, which influences the firm’s ability to develop and offer superior value for its export customers (Cadogan, Diamantopoulos and Siguaw, 2002). Much of the strategy and marketing literature recognizes market orientation as an essential marketing capability or strategic marketing resource that has the potential to enable a firm to gain a positional advantage and to achieve superior firm performance (e.g. Hult and Ketchen, 2001). According to the

resource-based view (RBV) of firms, resources that are valuable, rare, imperfectly imitable, and non-substitutable can enable the firm to better perform strategic actions that create a competitive advantage that ultimately enhances firm performance (Wernerfelt, 1984; Barney, 1991). When an organization adopts and implements a market orientation, albeit an export market orientation, it has embraced an information processing perspective, thereby making a market orientation an indigenous key market-based asset in the form of unique customer and competitor market intelligence that allows the firm to achieve superior performance (Morgan, Vorhies and Mason, 2009).

A review of prior research on the export market orientation—export performance link reveals that the relationship is generally a positive one. More recent studies of export market orientation have focused on examining specific organizational processes through which it influences performance. For instance, Murray, Gao and Kotabe (2011) found that marketing capabilities (i.e. pricing capability, new product development capability, and marketing communication capability) mediate the export market orientation-performance relationship while competitive advantages (i.e. low-cost advantage, differentiation advantage) partially mediate it. Similar studies have been conducted to examine the mediating role of relational behaviors (i.e. relationship distance, cooperation, dependence) (Racela et al., 2007), and relationship quality (e.g. Lages et al., 2009; Nguyen and Nguyen, 2010). This paper follows this line of inquiry and considers the exporter's market orientation as an antecedent of other organizational behaviors rather than as a direct determinant of export performance.

### Interfirm Communication

Communication is a fundamental human activity essential to create, maintain and foster relationships between and among different parties. Communication in organizations have been identified by several key characteristics such as vertical, horizontal or diagonal (Simpson, 1959); degree of formality (e.g. Anderson and Narus, 1990); satisfaction with communication (Roberts and O'Reilly, 1974); communication quality and quantity (Wiio, 1988); and verbal and nonverbal communication (Graham, 1985). Communication between two firms can involve different types of interactions (e.g. face-to-face, email) between different groups and individuals of each firm. Interfirm communication, therefore, can be defined broadly as the amount, frequency, and quality of information shared between exchange partners (Mohr and Sohi, 1996). Successful interfirm exchanges are highly contingent upon good and frequent communication (Bleeke and Ernst, 1993). Generally, communication as a concept is often described as a multidimensional global construct. However, much of the prior research examines only the dimension of communication frequency. Although this dimension has been defined in several ways, in this paper, interfirm communication frequency refers to the number of contacts made between members of the different parties (Mohr and Nevin, 1990).

'Good' communication corresponds mainly with the concept of communication quality. Many studies in relationship marketing have identified communication quality as a dimension of a relationship construct. For instance, in the context of supplier-buyer relationships, Roehrich, Spencer and Florence (2002) find the emergence of a 'communication quality' dimension as part of their exploratory study of the relationship atmosphere construct.

Inadequate communication with exporters has long been identified as a major problem facing importers (Katsikeas and Dalgic, 1995). Views of cognitive structures from the field of social psychology may be useful to explain the communication interaction between an exporter and its overseas distributors. Cognitive structures describe the basic mental processes people use to make sense of information and give meaning to it. When people with different cognitive structures engage in interpersonal communication, their differences in knowledge and of meanings often necessitate greater communication effort in order to ensure sufficient encoding and decoding of transmitted messages. In a study of manufacturer-retailer relationships, Hakkio and Laaksonen (1996) found that differences in the product meanings between manufacturers and

those of their retail customers facilitated more meaningful and frequent communication for the purpose of clarifying and reconciling product meanings into a shared and common understanding.

In an exporter-importer relationship where cognitive knowledge structures may differ, greater communication quality and more frequent communication interactions could be more prevalent. Firms with a strong export market orientation would engage in a form of organizational information gathering and processing that enhances information quality and information utilization. This information processing enables the exporters to familiarize themselves with the general cultural peculiarities and specific social exchange norms of their importers. Highly export market-oriented firms are not likely to keep their key importers at arms-length, but rather, would engage in more relevant and frequent communications and interactions with them in order for both parties to gain a common understanding of their foreign market in which the importer is more knowledgeable and the exporter is less familiar with. Therefore, the following relationships are hypothesized:

*H1a: Export market oriented firms will have a higher degree of communication frequency with their overseas distributor.*

*H1b: Export market oriented firms will have a higher degree of communication quality with their overseas distributor.*

### Communication Frequency, Communication Quality and Interfirm Cooperation

Cooperation can be broadly described as the process of several parties working together towards the same goal. Definitions of cooperation found in the marketing literature are consistent with this broad description (e.g. Morgan and Hunt, 1994; Leonidou, Katsikeas, and Hadjimarcou, 2002). The underlying themes of these definitions of interfirm cooperation are that it is a process by which individuals, groups and organizations come together, interact and that it forms psychological relationships for mutual gains or benefits (Smith, Carroll and Ashford, 1995). Cooperation is often included in marketing studies as a component or an item of a higher-order relationship construct, such as relationship quality (Lages et al., 2005; Lages et al., 2009) or relationship atmosphere (Roehrich et al., 2002), implying that cooperation is distinct from other relationship marketing constructs such as power, conflict, coordination, trust, and commitment.

Communication between two firms is a necessary element of relationship-building. Based on the relationship marketing paradigm (Morgan and Hunt, 1994), communication helps to build trust between firms and provides the information and knowledge that is required in order for cooperative activities to commence. In exporter-importer relationships, cooperation is shaped by particular norms of behavior, which may differ between the two parties, particularly when cultural or psychic distance is large. Such differences present major challenges in exporter-importer relationships to achieving a productive level of cooperation. However, in a study of international trade intermediaries, it was found that frequent, bi-directional and informal communication between firms improves cooperation (Balabanis, 1998). Building on these aforementioned arguments, the following hypotheses are advanced:

*H2: Exporter-importer communication frequency has can positively influence interfirm cooperation.*

*H3: Exporter-importer communication quality has can positively influence interfirm cooperation.*

### Interfirm Cooperation and Export Performance

Interfirm cooperation reflects expectations that the parties have about working together in order to jointly achieve both mutual and individual goals. Firms may be motivated to cooperate with their business customers or strategic partners in order to gain certain benefits such as stretching their resources, enhancing

their knowledge, reducing their costs and improving their performances in general. Based on the RBV line of thoughts, a firm that is resource-constrained may engage in interfirm cooperation to overcome related barriers to the firm's growth (e.g. Zhang et al., 2010). In an exporter-importer context, an exporter may be resource-constrained in terms of market and/or financial resources, while an overseas distributor may lack its own manufacturing resources. In essence, the exporter and its overseas distributor share its resources, with the exporter sharing its inventory and the importer sharing its market knowledge and/or financial resources. Accordingly, the RBV advocates interfirm cooperation as a means for firms to grow with the aid of a partner firm's resources (Combs and Ketchen, 1999).

In terms of the influence of interfirm cooperation on firm performance, much of the empirical evidence supports a positive influence, with a few exceptions of studies that find mixed results. For instance, Horta, Brito and Brito (2009) find that a firm's cooperation with its customers positively influenced firm growth (i.e. market share), but did not have any influence on its profitability. However, in the international marketing literature, the view that exporter-importer cooperation would have a positive impact on the exporter's firm performance has been supported by several prior studies (e.g. Jungbok, 2011, Racela et al., 2007). As a result, our last hypothesis can be postulated as:

*H4: Interfirm cooperation has a positive relationship with export performance.*

## RESEARCH METHODOLOGY

Data were collected over a four-week period during the months of June and July. The Thailand Exporter Directory, which lists over 4,000 firms, was used as the sampling frame for this study. A random sample of 500 firms were contacted by telephone to (1) confirm the firms' existences, (2) verify the firms' export activities, (3) to identify appropriate key informants, and (4) to secure the firm's participation in the study. Firms contacted that were out of business, no longer exporting, or declined to participate in our study were omitted from our list for further contact. Several initial contacts revealed that export activities of different products were managed by separate business units of the firm, thus, our unit of analysis is the strategic business unit (SBU). Our questionnaires were sent to identified informants of the randomly selected 445 export firms, most of which were situated in the greater Bangkok metropolitan area. To enhance the quality of the responses provided by key informants and to minimize common method variance, respondents were ensured of anonymity and confidentiality in the analysis and in the reporting of the results (Podsakoff et al., 2003). From the initial mailing, 253 questionnaires were returned. This yielded a response rate of 56.8 percent. Six questionnaires had excessive missing values and were dropped from further analyses. Our final sample is 247 SBUs within 174 companies, representing over 10 industries. A comparison between 'first-two weeks' and 'after-two weeks' responses on several firm characteristics (e.g. firm size, firm performance, etc.) indicated that nonresponse bias was not a concern in this study (Armstrong and Overton, 1977). Table 1 presents the sample characteristics.

### Questionnaire Development and Construct Operationalization

A back translation procedure was employed to translate the original English language scales to Thai in order to ensure conceptual and functional equivalences (Cavusgil and Das, 1997). The question sequence and item wording in the questionnaire were refined by a pretest of 10 managers and marketing experts.

Existing measures were sought and adapted for this study. All multi-item constructs were measured using a 7-point scale. *Export Market Orientation* (EXPORTMO) was measured from the 32-item MARKOR scale of Kohli, Jaworski and Kumar (1993), with the items being adapted to suit the context of an export firm. The EXPORTMO scale was used as a second-order construct, with three first-order factors: *Export intelligence generation* (EXPINTGEN), *Export Intelligence Dissemination* (EXPINTDISS), and *Export Responsiveness* (EXPRESP). EXPINTGEN comprises 10 items to assess the extent to which the exporter

undertakes activities to create export market intelligence about customers, competitors, the industry, and environmental changes. EXPINTDISS consists of 8 items that indicate the extent to which the exporter shares its export market intelligence among export staff and throughout other functional departments. EXPRESP has 14 items that represent the exporter's ability to design and implement actions based on the acquired export market intelligence.

Table 1: Sample Characteristics

Characteristic	Proportion (no.) n=247
<b>Functional Area of Respondent</b>	
Top-management (e.g. Owner, SBU head, GM, MD, V.P.)	47.8% (118)
Export	23.1% (57)
Marketing	14.2% (35)
Sales	9.7% (24)
Logistics	1.6% (4)
International	1.6% (4)
Other (e.g. IT, Accounting, Product design)	2.0% (5)
<b>No. of full time employees</b>	
1 to 60	38.1% (94)
61 to 120	18.6% (46)
More than 120	43.3% (107)
<b>Years SBU has been established</b>	
1 to 6 years	9.7% (24)
7 to 12 years	13.8% (34)
13 to 18 years	25.9% (64)
19 to 24 years	14.6% (36)
25 to 32 years	22.2% (55)
Over 32 years	13.8% (34)
<b>Industry</b>	
Garments, Textiles, and Clothing	44.1% (109)
Automotive Parts/Accessories	15.0% (37)
Electronics, Electrical Products and Parts	13.8% (34)
Construction/Industrial/Machinery & Equipment Products	7.7% (19)
Chemicals/Medical Supplies/Hygiene Products	5.7% (14)
Household/Consumer Products	5.7% (14)
Agriculture/Food Products	4.4% (11)
All others (i.e. Gems/jewelry, Gifts/Handicrafts)	3.6% (9)

*This table presents a summary of the characteristics of the key informants and their corresponding firms. From a random selection of 445 export firms listed in the Thailand Exporter Directory, 247 usable questionnaires were returned.*

For the exporter's interfirm interactions, the respondent was instructed to refer to a key overseas distributor (i.e. importer) of the firm. *Communication Frequency* (COMMFREQ) was measured by a single-item ratio scale in terms of the average number of personal contacts the exporter makes with the importer within a year. *Communication Quality* (COMMQUAL) was measured using the 5-item scale of Roehrich et al. (2002), which indicates the degree to which communications with the importer are amiable and clear. *Interfirm Cooperation* (INTERCOOP) was measured by the 6-item cooperation scale developed by Roehrich and Spencer (2003), which indicates the extent to which the exporter works closely, shares technical and commercial information and has compatible goals with the importer.

*Export Performance* (EXPPERF) was measured using 4-items to assess the exporter's performance in terms of export sales, export market share, export profits, and rate of new market entry in relation to the exporter's major competitors.

## DATA ANALYSIS AND RESULTS

An initial check of the data revealed five outliers, which led to the omission of those responses from the analysis. The presence of common method bias was checked by conducting a Harman's single-factor test (Podsakoff et al., 2003). All indicators of the four multi-item constructs were subjected to an exploratory

factor analysis, which resulted in no single factor emerging and no one factor accounting for a majority of the total variance of these four variables.

From confirmatory factor analysis (CFA), items with factor loadings below 0.50, mostly items that were reverse-worded, were dropped from further analysis. This is not surprising, as reverse-worded items have been found to be particularly problematic for Asians because of their unfamiliarity with such types of statements as well as their inherited cultures (Wong, Rindfleisch and Burroughs, 2003). Four items were used to measure EXPINTGEN. Four items were used to assess EXPINTDISS. Five items were used to measure EXPRESP. Each of these three refined components shows acceptable internal consistency: EXPINTGEN ( $\alpha = .71$ ), EXPINTDISS ( $\alpha = .81$ ), and EXPRESP ( $\alpha = .78$ ). The measures of each component were summated and used as indicators for the EXPORTMO latent construct. In aggregate, the EXPORTMO construct has adequate internal consistency ( $\alpha = .62$ ). Of the six items used to measure INTERCOOP, two were dropped.

The CFA measurement model including EXPORTMO, COMMQUAL, COMMFREQ, INTERCOOP and EXPPERF was estimated using AMOS v.17 based on the equations 1 and 2. EXPORTMO is an exogenous variable ( $\xi_1$ ) measured by three indicators ( $x_1, x_2,$  and  $x_3$ ) where COMMFREQ ( $\eta_1$ ), COMMQUAL ( $\eta_2$ ), INTERCOOP ( $\eta_3$ ), and EXPPERF ( $\eta_4$ ) are endogenous variables, which were measured by the respective manifest indicators ( $y_1$  to  $y_{14}$ ). Equation 1 shows the measurement model of the exogenous variable and Equation 2 illustrates the measurement model of the remaining four endogenous variables in our study. The corresponding matrices of the two measurement models are presented below each of the equations.

$$X_{(3 \times 1)} = \Lambda_{(3 \times 1)} \xi_{(1 \times 1)} + \delta_{(3 \times 1)} \tag{1}$$

$$\begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} = \begin{bmatrix} \lambda_{x_{11}} \\ \lambda_{x_{21}} \\ \lambda_{x_{31}} \end{bmatrix} \times [\xi_1] + \begin{bmatrix} \delta_1 \\ \delta_2 \\ \delta_3 \end{bmatrix}$$

$$Y_{(14 \times 1)} = \Lambda_{(14 \times 4)} \eta_{(4 \times 1)} + \varepsilon_{(14 \times 1)} \tag{2}$$

$$\begin{bmatrix} y_1 \\ y_2 \\ y_3 \\ y_4 \\ y_5 \\ y_6 \\ y_7 \\ y_8 \\ y_9 \\ y_{10} \\ y_{11} \\ y_{12} \\ y_{13} \\ y_{14} \end{bmatrix} = \begin{bmatrix} \lambda_{y_{11}} & 0 & 0 & 0 \\ 0 & \lambda_{y_{22}} & 0 & 0 \\ 0 & \lambda_{y_{32}} & 0 & 0 \\ 0 & \lambda_{y_{42}} & 0 & 0 \\ 0 & \lambda_{y_{52}} & 0 & 0 \\ 0 & \lambda_{y_{62}} & 0 & 0 \\ 0 & 0 & \lambda_{y_{73}} & 0 \\ 0 & 0 & \lambda_{y_{83}} & 0 \\ 0 & 0 & \lambda_{y_{93}} & 0 \\ 0 & 0 & \lambda_{y_{10\ 3}} & 0 \\ 0 & 0 & 0 & \lambda_{y_{11\ 4}} \\ 0 & 0 & 0 & \lambda_{y_{12\ 4}} \\ 0 & 0 & 0 & \lambda_{y_{13\ 4}} \\ 0 & 0 & 0 & \lambda_{y_{14\ 4}} \end{bmatrix} \times \begin{bmatrix} \eta_1 \\ \eta_2 \\ \eta_3 \\ \eta_4 \end{bmatrix} + \begin{bmatrix} \varepsilon_1 \\ \varepsilon_2 \\ \varepsilon_3 \\ \varepsilon_4 \\ \varepsilon_5 \\ \varepsilon_6 \\ \varepsilon_7 \\ \varepsilon_8 \\ \varepsilon_9 \\ \varepsilon_{10} \\ \varepsilon_{11} \\ \varepsilon_{12} \\ \varepsilon_{13} \\ \varepsilon_{14} \end{bmatrix}$$

All the factor loadings of the individual indicators on their respective constructs are statistically significant ( $p < .001$ ), presenting support of the dimensionality and convergent validity of the constructs (Anderson and Gerbing, 1988) (see Figure 2). Additional analysis of correlations between items satisfied the  $r = .85$  cutoff (Garson, 2001), indicating the model demonstrates adequate discriminant validity. Overall, the results indicate that the measurement models fit the data well and the constructs possess adequate

measurement properties for further analyses. The construct descriptive statistics and correlations are presented in Table 2.

Table 2: Construct Descriptive Statistics and Correlation Matrix

Construct	Items Used	Mean	Std. Dev.	1	2	3	4	5
1. EXPORTMO	3	4.80	.87	0.62				
2. COMMFREQ	1	13.95	22.21	0.09	--			
3. COMMQUAL	5	4.96	1.10	0.35***	0.12*	0.81		
4. INTERCOOP	4	4.91	1.17	0.46***	0.14**	0.62***	0.78	
5. EXPPERF	4	4.51	1.22	0.36***	0.10	0.22***	0.31***	0.87

This table shows the descriptive statistics and correlations between the key constructs included in this study. EXPORTMO = Export market orientation; COMMFREQ = Communication frequency; COMMQUAL = Communication quality; INTERCOOP = Interfirm cooperation; EXPPERF = Export performance. All constructs are composite scores of multiple items, with the exception of COMMFREQ, which was measured as a single-item. Cronbach's alphas are placed in the diagonal.

\*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.10$

### Structural Model Estimation and Results

Having achieved satisfactory fit in the measurement model, the structural model was then analyzed. A direct path from EXPORTMO to INTERCOOP was included in the model although it is not hypothesized. The EXPORTMO-INTERCOOP parameter estimate is intended to serve as a baseline to compare direct and indirect effects of EXPORTMO on INTERCOOP. Path coefficients were estimated using maximum likelihood estimation and are shown in Figure 2. The overall fitness indices indicate good fit of the data ( $\chi^2_{(111)} = 230.36, p < .01$ ; GFI = .90; TLI = .91; CFI = .93; RMSEA = .067).

Empirical support was found for all but one of the proposed hypotheses. Specifically, H1a predicted that export market-oriented firms would have a higher degree of communication frequency with their overseas distributor. Moderate support is found for H1a ( $\gamma_{11} = 0.16, p < .04$ ). H1b, which posited that export market-oriented firms would have higher levels of communication quality with their overseas distributor, is supported, with a highly significant positive effect ( $\gamma_{21} = 0.45, p < .01$ ). The data provided no support for H2 ( $\beta_{31} = 0.02, p > .10$ ), which expected a positive relationship between communication frequency and interfirm communication. H3 predicted a positive relationship between communication quality and interfirm cooperation, which is supported with a highly significant effect ( $\beta_{32} = 0.64, p < .01$ ). Finally, a positive relationship between interfirm cooperation and export performance as postulated by H4 is fully supported through a highly significant effect ( $\beta_{43} = 0.39, p < .01$ ). The results of the hypotheses testing are presented in Table 3. A full structural equation model along with the parameter estimations for both measurement and structural paths is illustrated in Figure 2. The additional path of the direct effect of export market-orientation on interfirm cooperation (depicted by a dotted line) is highly significant ( $\gamma_{31} = 0.35, p < .01$ ). This indicates that the role of export market-orientation on interfirm cooperation is both direct and partially mediated by communication quality.

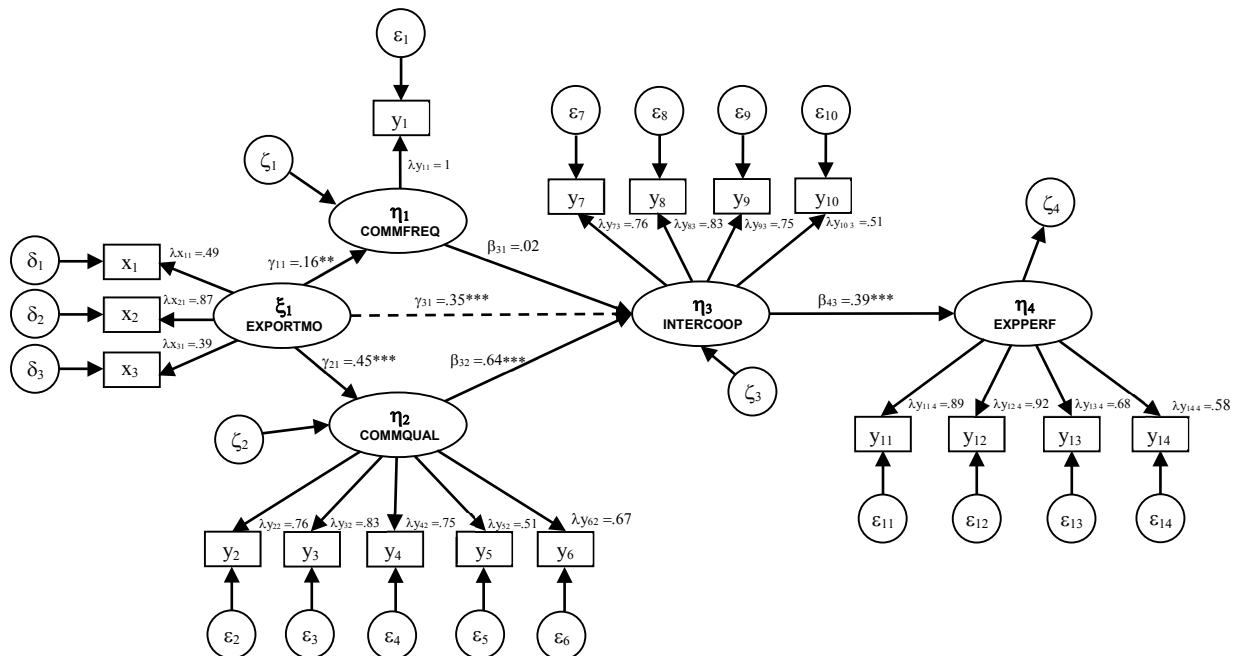
Table 3: Summary of Results of Hypotheses Testing

Hypothesis	Expected Sign	Parameter estimate	t-value	Results
H1a: EXPORTMO -> COMMFREQ	+	0.16	2.07	Supported
H1b: EXPORTMO -> COMMQUAL	+	0.45	4.21	Supported
H2: COMMFREQ -> INTERCOOP	+	0.02	0.47	Not Supported
H3: COMMQUAL -> INTERCOOP	+	0.64	6.87	Supported
H4: INTERCOOP -> EXPPERF	+	0.39	5.23	Supported

This table presents the standardized parameter estimate for hypotheses testing. Of the five hypotheses stated, four are supported by the data. H2, which hypothesized a positive relationship between communication frequency and interfirm cooperation is not supported.



Figure 2: Structural Path Model Parameter Estimates



This figure presents the structural equation model. All indicators (x's and y's), presented by 'squares', load significantly on their respective latent constructs ( $\xi$  and  $\eta$ 's), which are illustrated by 'ellipses'. Export Market Orientation (EXPORTMO) is an exogenous variable represented by  $\xi_1$ . The endogenous variables in the study include, Communication Frequency (COMMFREQ), Communication Quality (COMMQUAL), Interfirm Cooperation (INTERCOOP), and Export Performance (EXPPERF), which are represented by  $\eta_1, \eta_2, \eta_3,$  and  $\eta_4$ , respectively. Measurement errors ( $\delta$ 's and  $\epsilon$ 's) and structural model residuals ( $\zeta$ 's) are illustrated by 'circles'. The paths of the structural model were estimated using maximum likelihood estimation. A direct path from EXPORTMO to INTERCOOP, as indicated by the dashed lined, was included in the analysis although it is not hypothesized in order to obtain a baseline path coefficient to compare the direct and the indirect effects of EXPORTMO on INTERCOOP. The data fit the model well, as suggested by the fit indices of  $\chi^2_{(111)} = 230.36, p < .01$ ; GFI = .90; TLI = .91; CFI = .93; RMSEA = .067). \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.10$

Post-hoc Analysis

To address the lack of support for H2, additional analyses were conducted in order to examine possible moderating effects. This was done by applying subgroup analyses on the basis of three firm characteristics, including exporter firm size (i.e. smaller as '1 to 120 employees' versus larger as 'more than 120 employees'), exporter firm age (i.e. younger as '1 to 18 years' versus older 'over 18 years'), and industry type (i.e. labor-intensive industries as 'garments, textiles, and clothing/agriculture/food' versus 'others'). The standardized parameter estimates of the subgroup analyses are reported in Table 4. Across all subgroups, the relationship between interfirm communication frequency and interfirm cooperation as hypothesized in H2, remains insignificant.

As seen in Table 4, the subgroup parameter estimates are consistent with those of the pooled data, with the exception of the relationship between export market orientation and communication frequency. More specifically, export market orientation has no relationship with communication frequency among larger exporter firm ( $\gamma_{11} = 0.05, p = .662$ ), older exporter firms ( $\gamma_{11} = 0.09, p = .423$ ), and exporters of labor-intensive products ( $\gamma_{11} = 0.01, p = .920$ ), which refutes H1 and contradicts the result of the pooled data. These results imply that the relationship between export market orientation and interfirm communication frequency is contingent upon certain firm characteristics.

Table 4: Subgroup Structural Model Standardized Parameter Estimates

Path	Subgroup Standardized Parameter Estimates					
	Exporter Size		Exporter Firm Age		Industry Type	
	Smaller Exporters (n=139)	Larger Exporters (n=103)	1-18 Years (n=117)	Older than 18 years (n=125)	Labor-intensive (n=116)	Other (n=126)
EXPORTMO -> COMMFREQ	0.25**	0.05	0.26**	0.09	0.01	0.32**
EXPORTMO -> COMMQUAL	0.42***	0.44**	0.45***	0.43**	0.59***	0.47**
COMMFREQ -> INTERCOOP	0.00	0.04	0.04	0.05	0.10	-0.06
COMMQUAL -> INTERCOOP	0.62***	0.60***	0.69***	0.52***	0.55***	0.64***
INTERCOOP -> EXPPERF	0.39***	0.47***	0.37***	0.41***	0.52***	0.29***
EXPORTMO -> INTERCOOP	0.41***	0.29**	0.26**	0.45***	0.32**	0.44**

*This table presents the standardized parameter estimates from subgroup structural equation model analyses with the primary aim to determine whether the lack of a significant relationship between communication frequency and interfirm cooperation is moderated by exporter firm characteristics. Subgroups were defined by three characteristics of firms including (1) exporter size in terms of number of employees, (2) exporter firm age in terms of years, and (3) industry type in terms of labor-intensity of product manufactured. These three firm characteristics do not moderate the relationship between communication frequency and interfirm cooperation. Overall, all subgroup parameter estimates are consistent with those found from the pooled data, with the exception of parameters estimates for the relationship between export market orientation and communication frequency. \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.10$*

## DISCUSSION AND CONCLUSION

This study was motivated by a desire to gain a better understanding of the relationships between export market orientation, interfirm communication, interfirm cooperation, and export performance. In doing so, we integrated the resource-based view, perspectives of cognitive structures from social psychology, and relationship marketing theory to propose the relationships among our constructs of interest. Our interdisciplinary approach contributes to the fields of strategic management, international marketing, and relationship marketing. Our study found that highly export market-oriented firms engage in higher levels of communication frequency and communication quality with their major overseas distributor. This indicates that exporters with a strong market orientation have fewer misunderstandings, easily reach agreements on contract terms, provide sufficient attention to and conduct a higher number of personal meetings per year with their overseas distributor. While interfirm communication quality has a strong positive effect on cooperation in terms of the exporter and importer working more closely together, the importer more willingly sharing technical or commercial information, setting compatible goals with one another, and putting cooperation before one another's short-term profits, the frequency for communication did not have any relationship with cooperation. In other words, our results show that the number of personal meetings that the exporter has with its overseas distributor is in no way related to interfirm cooperation. Lastly, our findings are consistent with prior research (e.g. Becchetti and Rossi 2000; Racela et al. 2007), revealing a strong positive relationship between cooperation and firm performance, at least in terms of the Thai exporter achieving export sales, export market share, export financial performance, and export market entry at a level higher than their competitors.

These results also present two additional meaningful practical insights for managers. One implication of the results is that exporters should establish a high level of cooperation with their overseas distributors since cooperation positively contributes to firm export performance. An exporter's cooperation with its overseas distributors can be improved when the exporter focuses on communication behaviors that foster clear and relevant information exchanges, which are based on the exporter's acquired and utilized market intelligence. The other implication of these results is that exporters must focus on 'quality' rather than 'quantity' in communication behaviors and the interactions with their overseas distributors. Export market-oriented firms are better off engaging in purposeful personal meetings (i.e. quality communication) rather than making personal contacts with their overseas distributor perhaps merely for the sake of 'keeping in touch.' Excessive or unnecessary personal meetings between the exporter and the importer may simply

increase the exporter's administrative or selling costs as well as serve as a misallocation of resources (i.e. time, effort) that could be better spent elsewhere in the export operation.

Despite the aforementioned theoretical and managerial contributions of this study, we acknowledge several limitations. Firstly, although the empirical evidence provided support for most of the hypothesized relationships, the cross-sectional nature of the data prohibits the temporal extensions of the findings. Replications of this study and longitudinal research methods can enhance the generalizability of the results over time and across contexts. Secondly, the nonsignificant relationship between interfirm communication frequency and interfirm cooperation should be given further attention. While our study, presented an explanation as to why theory is not supported, future consideration of other potential moderating variables, such as those relating to cultural differences (e.g. psychic distance) or relationship characteristics (e.g. dependence) may lend valuable insights on the communication frequency—interfirm cooperation link. Lastly, our study only examined the sole perspective of the exporter. Obtaining dyadic data from both the exporter and its importer/distributor would provide a richer understanding of the interfirm communication and collaboration.

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