International joint venture top management teams: does heterogeneity make a difference?

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ABSTRACT

This article examines relationships among top-management-team composition, group processes, and the effects of those processes on cohesion for international joint venture (IJV) teams in Thailand. For culturally diverse teams, demographic elements (member age, length of team tenure, level of education, functional expertise) and cultural characteristics (country of education, nationality, affiliation with a parent organization, primary language spoken) define heterogeneity. Overall, demographic heterogeneity had a significant influence on openness among team members and on cohesion when mediated by openness. Cultural heterogeneity had a significant influence on openness and cohesion among team members, with the dimensions of trust (loyalty and openness) having a significant influence on cohesion.

Key words: International Joint Ventures, Top Management Teams, Heterogeneity, Loyalty, Openness and Cohesion.
INTERNATIONAL JOINT VENTURE (IJV) TOP MANAGEMENT TEAMS: DOES HETEROGENEITY MAKE A DIFFERENCE?

INTRODUCTION

Researchers have examined a wide array of challenges in creating and managing international joint ventures (IJVs), including issues of partner selection, strategic complementarities, and partner experiences with JVs (Li & Shenkar, 1996). Although researchers have highlighted cultural differences and human resource challenges (Harzing, 2004; Kirkman, Lowe, & Gibson, 2006), more research is necessary on one pivotal factor impacting IJV success, that being the functioning of the top management team (Li, Xin, Tsui, & Hambrick, 1999).

Additionally, in spite of the proliferation of research on IJVs in recent times more conclusive research is necessary on IJVs in South East Asia. IJV’s in South East Asia are an important dimension of contemporary business and the functioning of the IJV’s top management team in South East Asia may be different due to cultural, economic or sectoral reasons. Therefore, understanding the functioning of the IJV’s top management team in this economic region provides a significant contribution to the IJV literature. Thailand was selected as the country to draw the sample from because of the availability of a large and reliable sampling frame, a conducive foreign direct investment (FDI) climate in which the IJV form of FDI is likely to proliferate and its importance as a future production platform for growth oriented domestic firms (Julian & O’Cass, 2002).

The usefulness of understanding TMTs as they impact their organizations has been well documented in the literature. Additionally, the growth of international business highlights the
importance of the IJV. This study brings these two streams of research together and attempts to make three contributions. First, this study examines a unit of analysis that is receiving limited attention in the literature, the TMT of an IJV entity in a developing country of South East Asia. Second, this study departs from the typical research strategy of relying on archival data and demographic variables in examining TMTs, and includes measures of group interactions and processes. Finally, this study combines the above two aspects to investigate a neglected topic in organizational contexts: the relationships between demographic and cultural heterogeneity of TMTs, group processes and outcome variables in the organizations they lead.

LITERATURE REVIEW

The nature and outcomes of TMT-member interactions and team processes have been argued to influence and shape an organization (Eisenhardt, 1989). Indeed, a number of studies conducted in the non-venture context have found a significant relationship between the nature of TMT processes and a firm’s financial performance (e.g., Dennison, 1990). Therefore, a better understanding of the context and nature of team processes which affect strategic decision-making within IJVs should provide additional insight into the relationship between IJV strategic managerial and organizational performance. Prior studies of IJVs support the tenet that a venture’s TMT is a critical component of venture success (Hambrick et al., 1996). It is generally believed that the effective management of complex organizations requires the participation of many individuals at the top level of an organization because each contributes different sorts of knowledge and expertise (Amason, 1996). As such, in the context of an IJV, the involvement of top managers in the operation of their organizations affects the TMT’s cohesion and the resultant organizational performance and goal attainment (Elron, 1997).
One critical aspect for successful translation and, ultimately, effective team performance is the establishment and maintenance of a cohesive work environment (Fey and Beamish, 2001; Smith et al., 1994). Highly cohesive TMTs tend to reach high-quality decisions, implement those decisions, and continue to work together to guide their organizations.

Closely related to cohesiveness is the heterogeneity of the TMT. Heterogeneity in this study refers to the demographic and cultural differences among team member characteristics such as team member’s age, level of education, functional specialization and length of team tenure for demographic heterogeneity and member nationality, primary language spoken, country of education and organizational culture background for cultural heterogeneity. Prior research indicates mixed effects of heterogeneity on team processes and outcomes.

In general, team member differences can be unconstructive and impede the processes and interaction in which members need to function together as a team. The result can be that organizational performance is impaired (Knight et al., 1999). Research has shown that TMT members who were similar with respect to cultural and general demographic characteristics often approached problem-solving in a similar manner and, therefore, reached agreement more often during the strategic decision-making process (Hambrick and Mason, 1984). In contrast, members of heterogeneous teams who were dissimilar on the same characteristics were prone to engage in political behavior since their perceptions of the issues would be more likely to be at variance (Lane and Beamish, 1990).

However, the findings in the literature are inconclusive with some studies suggesting that group decision-making is enhanced by consideration of various alternatives and solutions (Hambrick et al., 1996) while others suggest that differences among venture managers tend to
be complex and affect negatively team performance and the achievement of venture goals (Knight et al., 1999). With such diametrically opposed views, the only conclusion which can be drawn is that research on TMTs and IJV success factors is inconclusive and requires further study of TMT diversity as it positively impacts the cohesive function of an IJV’s TMT and, ultimately, IJV performance.

The composition of a TMT, defined by the number of similarities (i.e., homogeneity) or differences (i.e., heterogeneity) among team-member characteristics, generally, is considered to be important due to its effects on decision-making processes within organizations (Hambrick and Mason, 1984). Several studies have found that differences among team members negatively affect member interactions, resulting in dysfunctional conflict (e.g., Putnam and Poole, 1987). While some level of conflict has been found to be beneficial during strategic decision-making, a dysfunctional level of conflict within TMTs is likely to impede the development of trust and cohesion among members (Fey and Beamish, 2000). Therefore, it appears that team composition and member interactions or processes affect strategic decision-making.

Although multiple person-specific conditions affect perceptions of trustworthiness, the focus in this study is on two that have been prevalent in the literature (Butler, 1991; Dooley & Fryxell, 1999; Jones & George, 1998). One is the belief that an individual might hold that others in a decision process will do no harm to him/her or take an advantage should an opportunity arise to do so (Jones & George, 1998). The other is the belief that individuals are willing to freely share and express ideas and information. The first of these characteristics is described as loyalty (Dooley & Fryxell, 1999) and the second as openness (Butler, 1991). Loyalty and openness are the Conditions of Trust most salient to a subordinate’s upward trust
toward a superior (Butler, 1991; Gabarro, 1978) and are among the most relevant conditions of trust in an IJV TMT in a developing country characterised by demographic and cultural heterogeneity.

Research on social interaction indicates the probability of conflict is high among managers with different demographic attributes because they are not likely to share the same goals, attitudes, and values (Williams & O’Reilly III, 1998). As a result, researchers such as Milliken & Martins (1996) have argued that the demographic composition of an IJV’s TMT can affect the strategic decision-making process. Differences in demographic attributes can elevate the level of conflict among members. This, in turn, might influence social interaction in a potentially negative manner. For instance, managers who are too dissimilar may become unwilling or unable to compromise together to resolve differences (Milliken & Martins, 1996). Research suggests that an impasse in decision-making occurs when: IJV executives are dissimilar with respect to their demographic characteristics; they have different socioeconomic roots; their concepts of the role of the venture are different from that of other managers (e.g., Kogut & Singh, 1988). Demographic heterogeneity, therefore, may have a negative impact on groups in terms of their expressed loyalty to the group, openness of communication, and team cohesion. As such, it is hypothesized that:

\( H_1: \) In the absence of a priori group interactions demographic heterogeneity decreases the degree of loyalty perceived by IJV TMT members.

\( H_2: \) In the absence of a priori group interactions demographic heterogeneity decreases the degree of openness perceived by IJV TMT members.

\( H_3: \) In the absence of a priori group interactions demographic heterogeneity decreases the degree of cohesion perceived by IJV TMT team members.
National cultural differences among managers have been found to negatively affect the nature of managerial interactions and to result in poor working relationships (Elron, 1997). As a result, some investigators have argued that deeply-rooted cultural differences at the top management level are likely to have a direct bearing on a TMT’s ability to realize stated IJV goals (Barkema et al., 1996). Elron (1997) reported that culturally-based cognitive differences resulted in a higher level of disagreement related to the subsidiary’s main issues. Furthermore, this issue based conflict had a negative effect on TMT performance. As such, Elron (1997) suggested that cognitive disagreements between the TMT members results in a general subjective feeling that the TMT does not function well, even if subsidiary performance indicates otherwise. Ultimately, this progression affects the working relationships of the managers.

Additionally, partners’ compatibility on specific organizational attributes can affect the effectiveness of the TMT and the performance of the joint venture (JV) (Fey and Beamish, 2001; Gray and Yan, 1992; Lane and Beamish, 1990). Dissimilarities in organizational structures, processes, and organizational climate (Fey and Beamish, 2001) can create problems of coordination and control which could lead to dissolution of the joint venture. In contrast, similarity on these same attributes can facilitate mutual understanding and collaboration (Fey and Beamish, 2001; Park and Ungson, 1997). Consistent with these findings are those of Bleeke and Ernst (1993) who found that IJVs are not as troublesome as joint ventures between companies with strong and weak cultures, or as those between companies with asymmetric financial ownership. Fey and Beamish (2001) argued that the compatibility of organizational processes and climates at minimum is more significant than the similarity of national cultures in explaining the dissolution, performance, and duration of a joint venture. Since dissimilar partners in a JV might spend more time and energy
establishing managerial processes that facilitate communication, they could incur greater costs and mistrust than would similar partners in a JV (Park and Ungson, 1997).

Therefore, we argue that cultural heterogeneity decreases the degree of loyalty, openness, and cohesion of team members. Furthermore, cultural differences are problematic for the development of trust and cohesion in teams, and the cultural distance between Thailand and its foreign partners is likely to be large. As such, it is hypothesized that:

\( H_4: \) In the absence of a priori group interactions cultural heterogeneity decreases the degree of loyalty perceived by IJV TMT members.

\( H_5: \) In the absence of a priori group interactions cultural heterogeneity decreases the degree of openness perceived by IJV TMT members.

\( H_6: \) In the absence of a priori group interactions cultural heterogeneity decreases the degree of cohesion perceived by IJV TMT members.

Empirical studies of IJVs consistently identify several factors associated with successful ventures as opposed to unsuccessful ventures (Inkpen & Beamish, 1997). Of these factors, a manager’s ability to develop trust (Madhok, 1995) and to encourage individuals to work cohesively as a team while also displaying a willingness to communicate, cooperate, and negotiate any disputes (Fey & Beamish, 2000) is crucial to IJV TMT success. That is, difficulties and the effects of differences among IJV managers are significantly reduced when levels of communication, trust, and cohesion are high (Amason, 1996).

The management literature generally suggests that interpersonal influences from peers or organizational socialization processes might influence the development of trust by building
loyalty or openness to the immediate work group or team. Acknowledging the utility of trust, Williamson (1985, 62-63) observed that “Other things being equal, … exchange relations that feature personal trust will survive greater stress and will display greater adaptability,” presumably because trust when measured by loyalty and openness enhances cohesion among individuals. It is not surprising that studies of IJVs overwhelmingly support the notion that trust among managers is associated with venture success (Collins and Doorley, 1991; Wallace, 1992). For example, Madhok (1995) suggested that effective JV management depends on the development of trust and mutual respect among a venture’s top managers. Similarly, Collins and Doorley (1991) reported that virtually all IJV managers who participated in their study of factors that lead to JV success “put trust at the top of the list” (1991, 104). Furthermore, Wallace’s (1992) study of success criteria in American-Japanese IJVs found that managers identified mutual trust as one of the most important success factors. The contention of these scholars is based on the premise that without trust, team members will perform as individuals, whereas with trust, they become a powerful unit of collective performance. However, despite research findings that strongly support the importance of trust in managerial relations, IJV studies indicate that low levels of trust are common among venture top-managers (Collins and Doorley, 1991; Wallace, 1992) and tend to discourage the formation of cohesive, effective teams. Research and theory on cohesion and its importance to team processes support the contention that cohesion is positively affected by trust.

To develop the cohesion required to achieve IJV goals, IJV managers must overcome any negative effects of heterogeneity and become integrated as a team (Dooley and Fryxell, 1999). To do so, IJV managers must engage in decision-making processes in a way that encourages high-quality decisions without facilitating dysfunctional conflict that would
prevent the implementation of those decisions (Ding, 1997; Fey and Beamish, 2000) and, more importantly, that encourages trust.

Research on trust has been approached from many different perspectives (Bigley & Pearce, 1998). The most dominant perspective of trust is perception or attribution based on individual qualities or characteristics or trust at the group or team level of analysis. From this viewpoint, trust is seen as a resultant of an individual’s perceptions of the characteristics or qualities of certain others, groups, or systems. This research stream has focused primarily on different personal characteristics or attributions that determine an individual’s trustworthiness and on how those characteristics affect risk-taking behaviors and outcomes in exchange relationships (Dooley & Fryxell, 1999; Jones & George, 1998). This is the perspective of trust adopted for this study.

Although multiple person-specific conditions affect perceptions of trustworthiness, the focus in this study is on two that have been prevalent in the literature (Butler, 1991; Dooley & Fryxell, 1999; Jones & George, 1998). One is the belief that an individual might hold that others in a decision process will do no harm to him/her or take an advantage should an opportunity arise to do so (Jones & George, 1998). The other is the belief that individuals are willing to freely share and express ideas and information. The first of these characteristics is described as loyalty (Dooley & Fryxell, 1999) and the second as openness (Butler, 1991). Loyalty and openness are the Conditions of Trust most salient to a subordinate’s upward trust toward a superior (Butler, 1991; Gabarro, 1978) and are among the most relevant conditions of trust in an IJV TMT in a developing country characterised by demographic and cultural heterogeneity.
The decision to focus on these elements of trust is based on their relevance in previous work on the strategic decision-making process and information processing theory and on their relevance to this study. For example, Eisenstadt (1990) found that incompetence and betrayal within TMTs reduces information sharing within the teams, thereby undermining strategic decision-making effectiveness. Zand (1972) and Boss (1978) identify team member ability and support as critical elements for eliciting the trusting behaviors of information-sharing and receptivity to the influence of others. These attributions also are consistent with the perceived trustworthiness factors identified by Mayer et al. (1995). Our attributions of loyalty and openness are similar to McAllister’s (1995) conceptualizations of cognitive and affect-based trust. Both of these attributions provide good cues by which to confirm the sensibility of risk-taking in the strategic decision-making process. There are risks related to relying on and acting upon information given by dissenting team members under conditions of information asymmetry (Dooley and Fryxell, 1999). Thus, the attributions of loyalty and openness serve to lower the transaction costs associated with asymmetric information exchanges involving strategic alternatives (Chiles and McMackin, 1996).

That team members be viewed as loyal to each other is central to improving the quality of strategic decisions because loyalty encourages the full exploration of ideas and open communication, allowing team members to concentrate on the content and cognitive meaning of messages (Gibb, 1964). Perhaps even more importantly, team members loyal to the cause will be viewed prima facie as working toward group goals. Consequently, fears of reprisals are kept to a minimum. It follows then the attribution of loyalty promotes the fuller processing of information provided by a dissenting party (Dooley & Fryxell, 1999).
Conversely, in the absence of loyalty, the focus is less on the content of the dissenting information than on the intentions and motivations of the person providing the information. Others will assume parochial and self-interested motives, thereby limiting their exploration of the dissenting information or even holding related matters secret. Such limits undermine information-processing capability, increase transaction costs, and take a toll on decision quality and cohesion (Dooley and Fryxell, 1999). McGregor summarized best this potent and pervasive influence of loyalty, stating that organization members can “be themselves and not be fearful of the consequences… that even in the competitive struggle for power and status and the other rewards of corporate life, their fellow members and the leader will not take unfair advantage of their openness and attendant vulnerability” (1967, 163). As such, it is hypothesized that:

**H7:** Loyalty increases the degree of cohesion perceived by IJV TMT members.

The open expression of differing opinions and the consideration of different alternatives in the presence of integrative decision-making processes increases the quality of the team’s decisions (Dooley & Fryxell, 1999; Elron, 1997). Improving the quality of strategic decisions involves encouraging the full exploration of ideas and open communication, allowing team members to concentrate on the content and the cognitive meaning of messages (Gibb, 1964; Jones & George, 1998). The attribution of openness promotes the fuller processing of information by the IJV Top Management Team, leading to greater cohesiveness within the team and to better-quality decisions (Elron, 1997). As such, it is hypothesized that:

**H8:** Openness increases the degree of cohesion perceived by IJV TMT members.
When investigating the relationship between team heterogeneity and creative problem-solving, most previous studies have considered the processes of uni-national teams whose members were committed or held loyalties to a single organization. However, managers who constitute an IJV TMT often come from separate or distinctive cultures and have well developed beliefs and methods for dealing with the complexities of corporate decision-making. While excessive levels of trust and cohesion may lead to inferior decisions, theory posits that this outcome is not likely within IJV TMTs due to the complex nature of heterogeneity found in such teams (Julian et al., 2004).

As a consequence, managers from different backgrounds and organizational experiences are likely to have different attitudes and values and hold divergent points of view (Julian et al., 2004). Team-member differences might encourage debate among managers to such an extent that communication problems and negative reactions by members to the team experience (Julian et al., 2004) inhibit the development of cohesion and trust. These problems would tend to limit interaction among team members and the exchange of valuable information. As a result of this decreased communication and increased conflict associated with team heterogeneity, there could exist a negative influence on team decision-making processes and outcomes (Julian et al., 2004). Specifically, low levels of trust and cohesion and less frequent communication are likely to negatively affect the quality of decisions which these teams generate (Knight et al., 1999). However, prior relationships between firms provide a powerful counterbalance to cross-cultural differences (Park and Ungson, 1997). Prior relationships between partners create trust and familiarity (Gulati, 1995; Kogut, 1989; Park and Russo, 1996). Trust reduces opportunistic behaviors and facilitates conflict resolution, thereby enhancing the quality of decisions which these teams generate and of the cohesion within the teams (Park and Ungson, 1997).
Based on this discussion, a model of the variables which affect IJV-TMT-member processes is shown in Figure 1. The relevance of cultural and demographic team heterogeneity to this research is based on their effects on the group processes of cohesion and trust. To review, both cultural and demographic heterogeneity have been found to negatively affect trust and cohesion within multi-cultural teams because managers are either disinclined or unable to easily overcome their differences in order to function as a team (Barkema et al., 1996). Regarding the team process variables, research and theory on cohesion and their importance to team processes support the contention that trust positively affects cohesion, and that cohesion and trust positively affect and reinforce each other (Fey and Beamish, 2000; Smith et al., 1994; Wallace, 1992). These process variables positively and directly affect the attainment of organizational goals (Amason, 1996).

Figure 1. Theoretical Framework of Heterogeneity, Loyalty, Openness, and Cohesion
RESEARCH DESIGN

This study is designed to test the model’s relationships on multi-cultural top management teams of IJV’s in Thailand. The structural model and measurement model were tested using structural equation modeling.

To test the research hypotheses, a survey was conducted of organizations engaged in joint ventures (JVs) in Thailand. The study sample consisted of Thai companies that were in JV relationships with non-Thai firms. Each firm included in the study had to exhibit two characteristics. First, no partner could have greater than 80 percent equity participation in the venture. Second, each partner had to have greater than 20 percent equity participation in the venture (Makino & Beamish, 1998).

An initial list of 2,000 companies operating in Thailand was obtained from the Thai Board of Investment. From this list, a census sample of 829 companies was identified as containing foreign companies situated in IJV relationships with Thai companies which met the criteria for inclusion in the study. The final sample of companies operated in the following industries: agriculture, mining, light industries, metal working, electronics, chemicals and services.

A three-step procedure was used to secure the return of the self-administered mail surveys. First, the survey instrument was translated from English into Thai, then back-translated into English to ensure that the intended meaning of the statements was accurate. To reduce confusion and ambiguity, the survey instrument was pre-tested through personal interviews with the managing directors of 10 Foreign-Thai IJVs in Thailand, after which minor revisions to the survey were made.
Second, an introductory letter and a copy of the revised survey were sent to all managing directors of companies who met the criteria to be included in the sample. The letter and all instructions and statements contained both English and Thai renditions. In an effort to increase the response rate, a stamped envelope addressed to a colleague at Bangkok University - who agreed to collect the completed questionnaires - was included in the mailing.

Third, four weeks after the questionnaires were received by the recipients, several attempts were made to contact each recipient via telephone to answer possible questions and to encourage participation. Eighty-eight individual responses were received, a 10.6% response rate. This response rate is normal for most mail surveys (Groves, 1990; McDougall, Covin, Robinson, & Herron, 1994). Also similar response rates had been reported in prior international marketing research (Kaynak & Kuan, 1993; Li & Ogunmokun, 2000) with sample sizes of 53 being reported (Mintu-Wimsatt & Calantone, 2000).

A multi-item questionnaire was used to collect the data. The research instrument was designed to measure two independent variables (cultural and demographic heterogeneity), two process variables (loyalty and openness as measures of trust), and one dependent variable (cohesion). Each construct in the research instrument is discussed below.

Items employed to measure demographic heterogeneity were team member’s age, level of education, functional specialization, and length of team tenure. Items measuring cultural heterogeneity included member nationality, primary language spoken, country of education, and organizational culture background (parent organization affiliation, if any). Each of the eight items was a self-report measure. All of the items employed to measure the two types of
heterogeneity were categorical in nature. Therefore, Blau’s (1977) index of heterogeneity (1-\(\sum p_i^2\)) – where \(p\) is the proportion of group members in a category and \(i\) is the number of different categories represented in a team – was used to construct the two separate measures of demographic and cultural heterogeneity.

Through a content analysis of managers’ suggestions and previous studies of managerial trust, Butler (1991) developed the Conditions of Trust Inventory. Two of the factors of trust developed by Butler (1991) were loyalty and openness. They were deemed to be the most appropriate to assess trust in multicultural TMTs of IJVs in Thailand since loyalty is a frequently examined construct in the research literature. Furthermore, loyalty and openness are most salient to a subordinate’s upward trust toward a superior (Dooley & Fryxell, 1999; Gabarro 1978). The loyalty measure consisted of three response items and measured the characteristic of disinclination toward opportunism. The openness measure also consisted of three items and measured individual team members’ willingness to express ideas freely.

A four-item cohesiveness index used by Elron (1997) was adapted to assess the cohesion perceived by team members. Items related to the team as a whole and included such statements as: (1) how readily members defended other team members from outside criticism, (2) how well members helped each other on the job, (3) how well members got along with each other, and (4) how well members stuck together as a team.

**DATA ANALYSIS**

Prior to analyzing the data the issue of non-response bias is addressed. An “extrapolation procedure” was used to assess non-response bias in order to determine whether respondents
were similar to non-respondents (Armstrong and Overton, 1977). Frequencies and independent *t*-tests were used to determine whether significant differences existed between the sample of 88 respondents and the target population of 829 Thai-Foreign IJVs using the classification criteria of “industry membership”. It was determined that no significant differences existed between the sample and the target population for this classification variable. Therefore, the sample can be considered sufficient to draw conclusions about Thai-Foreign IJVs for the issues under study.

Next, some descriptive statistics of the sample are provided. In relation to the breakdown by home country of the JV foreign partners: approximately 50.0% of the JV’s foreign partners came from Japan; 23.5% stemmed from countries in western Europe; 11.8% of the JV’s foreign partners emanated from North America (including the United States (U.S.), Canada, and Mexico); the remainder of the sample of JV foreign partners originated from Australia, ASEAN (Association of South East Asian Nations that included Brunei, The Philippines, Indonesia, Thailand, Singapore, Malaysia, Cambodia, Laos and Myanmar), India, and Taiwan. This is very much consistent with the trends of foreign direct investment (FDI) in Thailand since 1978, with Japan and the U.S. being the principal contributors of FDI in Thailand since 1978 (Julian, 2001).

IJV teams ranged in size from two to nine members and averaged five members per team. The majority of respondents was aged 40-49 years and had been with their organizations an average of eight years. The majority (65.9%) of respondents had earned a four-year degree, 29.5% held the Master Degree, and 2.3% held high school diplomas. Seven different international regions of education were represented: 39.8% were primarily educated in
Thailand; 10.2% in the enumerated countries of North America; 11.4% in Japan; 5.7% in the ASEAN group of countries; 4.5% each in India, Taiwan, and western European countries.

Seven languages were represented: 53.4% Thai; 17% English; 14.8% Japanese; 5.7% Mandarin; 2.3% Hindi; 2.3% Taiwanese; 2.3% French. Six different cultures were identified: 67% Thai; 14.8% Japanese; 4.5% western European countries; 4.5% Indian; 4.5% Taiwanese; 2.3% Chinese. The poor cultural representation by North America – especially by the U.S. – is not surprising given that this sampling frame was provided by the Thai Board of Investment. Since U.S. firms often do not operate through the Thai Board of Investment when investing in Thailand, and since Thai Board of Investment Promoted Status is not a requirement to invest in Thailand, these estimates are likely to underestimate the extent of North American involvement in Thai IJVs (Julian, 2001). Most respondents indicated they had some prior business experience: 23.9% in accounting/finance/economics; 21.6% in general business; 18.2% in production/operations; 17% in marketing/public relations; 9.1% in engineering; 5.7% in research and development. 53% of the respondents were affiliated with a parent organization.

The analysis was conducted at the group level. The average score of the individual items for each group was calculated and then used for analysis at the group level. The structural equations modeling technique, Partial Least Squares (PLS), was used to analyze the data given that the sample size was small. Under conditions of a small sample size and violations in distributional normality, improper solutions such as negative estimates can often result with covariance-based approaches such as those implemented in LISREL, AMOS, and EQS (Chin, 1998). PLS is considered more suitable for use when the objective is causal-predictive testing rather than the testing of an entire theory (Chin, 1998).
In this study, demographic and cultural heterogeneity were the exogenous variables. Loyalty, openness, and cohesion were the endogenous variables. The results in relation to the measurement model are shown in Tables 1 and 2, and the results for the structural model are shown in Table 3 and Figure 2. A complex model cannot be evaluated on the basis of any single, general fit index. Multiple indices are required to assess a model in terms of its quality, sufficiency to explain the data, congruence with substantive expectations, and precision (Fornell & Cha, 1994). Since no distributional assumptions are required, the indices provided by the PLS analysis give evidence primarily for the existence of the relationships, rather than for precise estimations of effect size (Falk & Miller, 1992). The philosophy of soft modeling is concerned with presence or absence of effect rather than with absolute exactitude in the estimation of model parameters (Falk & Miller, 1992). The results are presented in two parts: tests of the measurement models and tests of the structural model.

The measurement model examines individual item reliability, internal consistency, and discriminant validity. Individual item reliabilities are assessed by examining the loadings of the measures on their corresponding construct. Table 1 presents the factor and cross-factor loadings of the individual items.
The internal consistency of each scale is examined using the composite scale reliability index developed by Fornell & Larcker (1981), which is a measure similar to Cronbach’s alpha. Fornell & Larcker (1981) recommend using a criterion cut-off of .7 or higher. Table 2 shows the internal consistency of each scale used in the study. All scales exhibit internal consistencies well above the .7 minimum.

Tests were conducted also to determine whether multicollinearity would be a concern. Table 2 shows the correlation matrix between the constructs of the model. None of the correlations between the independent variables is near or above the rule-of-thumb figure of .8. Correlations between variables above .8 indicate that the independent variables are linear functions of each other and could measure the same dimension. Variance Inflation Factors calculated for each independent variable range from 1.3 to 2.6, being well below the accepted standard of 10. Even if multicollinearity were present, PLS coefficient estimates have been shown to be robust under such conditions (Cassel & Hacki, 2000).

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<th>Table 1. Loading and Cross-Loadings of Measures</th>
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The numbers shown in the first column represent the original numbers as they appeared in the questionnaire.
Table 2 – Means, Standard Deviations, Internal Consistencies and Correlation of Constructs

<table>
<thead>
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<th>Construct</th>
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<th>Internal Consistency</th>
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<td>Cult. Hetero b</td>
<td>.2</td>
<td>.17</td>
<td>NA</td>
<td>.29</td>
</tr>
</tbody>
</table>

aFor adequate discriminant validity, the elements in each row and column for the sample should be smaller than the boldfaced element in that row.

bFor Partial Least Square (PLS) analysis, this measure is considered to be a single indicator. Therefore, internal consistency and average variance extracted for this measure could not be calculated with PLS.

In PLS, the discriminant validity of the items assessed is performed using criteria similar to a multi-trait multi-method analysis (Barclay et al., 1995). The represented construct should share more variance with its measures than it shares with other constructs in a model. Fornell & Larcker (1981) suggest use of the measure of Average Variance Extracted (AVE), the average variance shared between a construct and its measures. This measure should be greater than the variance between the construct and other constructs in the model. Table 2 shows the correlation matrix between the constructs in the model. The scores on the diagonal of the matrix are the square root of AVE. For adequate discriminant validity, the diagonal elements should be greater than the off-diagonal elements in the corresponding rows and columns. Results shown in Table 2 indicate that the criterion is met. Another criterion is that no measurement item should load more highly on a construct other than the construct it intends to measure. An examination of the factor and cross-factor loadings (Table 1) shows that all items satisfy the criterion.

Figure 2 and Table 3 shows the results of the structural model. We examine whether different forms of heterogeneity influence the levels of trust reported by IJV TMT members as
measured by loyalty and openness. Hypotheses 1-2 and 4-5 posit that both demographic and cultural differences negatively affect the dimensions of trust. The structural analysis shows that demographic heterogeneity is not a significant predictor of loyalty. The findings do not support $H_1$. Demographic heterogeneity does, however, have a significant and positive effect on team members’ reported levels of openness of communication. The more diversity within a team with regard to the demographic profile of the members, the more team members report that they perceive other members as willing to disclose to one another (Elron, 1997). Cultural heterogeneity does not contribute much to the prediction of the degree of loyalty reported by members of these teams ($H_4$ is not supported), but significantly predicts openness as reported between team members. As posited in Hypothesis 5, the greater the degree of cultural heterogeneity present, the less openness reported. Together, cultural and demographic heterogeneity explain 39% of the variability in the degree of openness reported by IJV TMT members.

<table>
<thead>
<tr>
<th>Table 3. A Summary Table of PLS Analyses</th>
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<tr>
<td>Path</td>
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<tr>
<td>Demographic Heterogeneity $\rightarrow$ Loyalty</td>
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<tr>
<td>Cultural Heterogeneity $\rightarrow$ Loyalty</td>
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<tr>
<td>Demographic Heterogeneity $\rightarrow$ Openness</td>
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<tr>
<td>Cultural Heterogeneity $\rightarrow$ Openness</td>
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<tr>
<td>Demographic Heterogeneity $\rightarrow$ Cohesion</td>
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<td>Cultural Heterogeneity $\rightarrow$ Cohesion</td>
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<td>Openness $\rightarrow$ Cohesion</td>
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<td>Loyalty $\rightarrow$ Cohesion</td>
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<tr>
<td>$R^2$ Loyalty</td>
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<tr>
<td>Openness</td>
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<tr>
<td>Cohesion</td>
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</table>

* $p<.05$  ** $p<.01$

Both demographic and cultural heterogeneity are theorized to have a negative affect on group cohesion. The results indicate that demography is not a significant predictor of cohesion ($H_3$
is not supported). However, cultural heterogeneity bears a significant positive relationship to group cohesion. The greater the cultural diversity in the team, the more highly members evaluate each other in terms of their ability to get along and help out each other. The probable explanation for this is that cultural diversity causes people to expect difficulty in getting along with others in the group. As a result, they likely exert more effort toward getting along with one another, and thus succeed. Alternatively, this outcome may have been as Park and Ungson (1997) concluded from their study that prior relationships between firms provided a powerful counterbalance to cross-cultural differences and the Top Management Teams in the Thai IJVs being investigated had long standing prior relationships. These findings are also consistent with Bleeke and Ernst’s (1993) case study results which demonstrated that IJVs can overcome early difficulties caused by cultural differences, and with Barkema’s et al. (1996) suggestions that learning between partners may offset cultural differences. Prior relationships between partners create trust and familiarity (Gulati, 1995; Kogut, 1989; Park and Russo, 1996). Trust attenuates opportunistic behaviors and can facilitate conflict resolution. Familiarity enhances a partner’s transparency and can reduce the cost of monitoring its activities, thereby enhancing performance (Park and Ungson, 1997).

Hypotheses 7 and 8, theorize that loyalty and openness have a positive effect on team members’ cohesion. The results of the PLS analysis demonstrates that both hypotheses are supported; that loyalty and openness significantly and positively impact the level of cohesion reported by IJV team members. All together, the measures of trust and heterogeneity explain 71% of the variability in the degree of cohesion reported by team members.
DISCUSSION

The results of this research confirm the basic tenet of the study - the effects of demographic heterogeneity and cultural heterogeneity in IJV TMTs are more complex than researchers previously have considered (Elron, 1997). The results provide some additional insight as to why the performance of joint ventures can be poor when cross-cultural top teams are in place (Knight et al., 1999). The findings support prior research which posits that the additional complexity of cultural influences on team member interactions can undermine the working relationships of venture managers unless they can integrate to some degree and function as a team (Elron, 1997).

Demographic heterogeneity is more influential in determining the amount of openness rather than loyalty in IJV TMTs. Demographic heterogeneity bears no significant association with loyalty in this study. It has, however, a significant positive relationship with the openness
feature of trust. Perhaps, this is because, in general, group heterogeneity has been found to generate greater creativity and innovation in problem-solving teams. Demographic heterogeneity in this case brought a diversity of viewpoints to the decision-making process since individual group members had different interpretations and perspectives and were willing to discuss the relevant issues openly (Wiersema and Bantel, 1992). With regard to TMTs, the Hambrick et al. (1996) study found that those which contained diversity had an overall positive effect on performance and outcomes. Alternatively, the significant positive effect of demographic heterogeneity on openness may be as concluded in their summary of research on team composition and outcomes, Filley et al. (1976) concluded that homogeneous teams perform best when solving routine problems and that solving ill-defined or strategic problems are best handled by heterogeneous teams (Hambrick et al., 1996). Perhaps, the nature of the problem being addressed by these IJV TMTs were of a strategic nature and the individual TMT members were willing to discuss the different options openly because of the different perspectives and interpretations they were able to bring to the table.

Conversely, cultural heterogeneity had a significant negative effect on openness and no effect on loyalty. That is, differences in age, level of education, length of team tenure, and type of functional experience are associated with greater levels of reported disclosure among team members. Perhaps these respondents perceived these differences as strengths rather than as points of contention (Elron, 1997). Alternatively, this outcome may again have been as Park and Ungson (1997) concluded from their study that prior relationships between firms provided a powerful counterbalance to cross-cultural differences. Their findings are consistent with Bleeke and Ernst’s (1993) case study results which demonstrated that IJVs can overcome early difficulties caused by cultural differences, and with Barkema’s et al. (1996) suggestions that learning between partners may offset cultural differences. Prior
relationships between partners create trust and familiarity (Gulati, 1995; Kogut, 1989; Park and Russo, 1996). Trust attenuates opportunistic behaviors and can facilitate conflict resolution. Familiarity enhances a partner’s transparency and can reduce the cost of monitoring its activities, thereby enhancing performance (Park and Ungson, 1997). Similar to Elron (1997) different perspectives, brought about by experience, wisdom, and different functional viewpoints, helped to increase the level of confidence which managers possessed during their decision-making and implementation activities. The greater the number of alternatives generated, the greater the likelihood that the set contained a more optimal solution to the situation at hand. Better decision-making results served to reinforce the benefit of the different perspectives. The development of these relationships between firms provided a powerful counterbalance to cross-cultural differences (Barkema et al., 1996).

The greater the differences among team members on cultural factors such as nationality, country of education, and language, the less likely it is that team members are willing to openly provide new ideas and information. The existence of cultural barriers for interpreting not only words themselves, but also context or frame of reference, greatly reduces the level of openness in communication which transpires. The low levels of reported openness might actually signify that these managers believed that greater levels of openness in communication are desirable. These findings lend support to prior research which finds that cultural differences among managers has a detrimental effect on managerial interactions and results in poor working relationships (Elron, 1997). These study findings suggest that deeply rooted cultural differences at the top-management level, because of their effect on managerial relationships and strategic decision-making, are likely to have a direct bearing on a TMT’s ability to realize stated venture goals (Barkema et al., 1996).
In this study, the development of cohesion is influenced by cultural heterogeneity, loyalty, and openness. In general, the effects are positive. While not significant, demographic heterogeneity demonstrated a negative relationship with cohesion. This supports the study of Jackson et al. (1991) in which reduced communication and increased conflict are associated with greater demographic diversity. Finally, it is evident that openness mediates to some degree the relationship between team heterogeneity and cohesion.

CONCLUSION

A common assumption in the management literature is that heterogeneous teams tend to yield higher-quality decisions than do homogeneous teams because members tend to bring unique contributions and perspectives to the decision-making process (Elron, 1997). In this study, such an assumption was supported at least for demographic heterogeneity. As expected, cultural differences among a team’s members likely encourage argumentation and debate to such an extent that they inhibit managers from effectively defusing dysfunctional conflict (Barkema et al., 1996). Apparently, the level of loyalty and openness within these teams provides managers with a mechanism to translate their differences into effective decision-making.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Whilst this study has shed some light on the relationship between demographic heterogeneity, cultural heterogeneity, loyalty, openness and cohesion in IJV Top Management Teams some limitations of the study should be noted. First, caution should be exercised in inferring causality from the model tested. The cross-sectional nature of the data makes this inference
tenuous. Taking this study as a point of departure longitudinal research is encouraged to examine the effect of heterogeneity on the processes and outcomes of the IJV group processes over time. Future research should also replicate this study in another developing country of South East Asia to see if the findings of this study can be validated using a different developing country as a sampling frame.

As in every research study investigating model interrelationships, model specification is a primary concern. The process of selecting the variables and specifying their interrelationships is grounded on current theory, prior empirical findings, and stated purpose of the study. Model misspecification is still possible, especially due to the omission of other antecedents to loyalty, openness, and cohesion. From a methodological perspective, a potential concern might be that all measures are self-reported. While structural equation modeling accounts for measurement error, future research could utilize multiple means by which to measure the variables in order to reduce common method variance. Efforts are made in this study to minimize the problem by pre-testing the instrument and selecting measures that minimize item overlap. While utmost care was taken with the translation of the instrument, respondents still might not interpret all questionnaire items uniformly. Although the structural model meets the criteria for adequate goodness of fit, the sample size is smaller than desirable. Future research should replicate the study with a larger sample.

The findings can only be inferred to Thai-Japanese, Thai-western European, and Thai-North American JVs. Japan, western Europe, and North America provided 85.3 percent of the principal foreign partners in this sample. In their 2004 study, Dhanaraj and Beamish examined the mortality rate of IJV partnerships when the delineation of the commonly defined split in equity is varied. They found that, while investments involving small
ownership levels have very poor survival rates, those with high ownership levels have mortality rates comparable to that of wholly-owned subsidiaries. A replication of this study should examine whether the relationships between the variables still would hold true under conditions of a changed split in equity between the JV partners.

**IMPLICATIONS FOR IJV MANAGEMENT AND SUCCESS**

It is important for the management of any company to be aware of the factors impacting on cohesiveness and success of IJV TMTs when contemplating the establishment of an IJV of any magnitude in a developing country. This study clearly indicates that it is important for the managers of IJVs to be sensitive to, and to minimize the impact of, the cultural heterogeneity of their IJVs Top Management Team in order to improve team processes. In this particular study, the cultural distance between IJV parent firms was especially great. Furthermore, the demographic heterogeneity (that is to say, differences in age, level of education, length of team tenure, and type of functional experience) of the team can be leveraged to encourage different perspectives to help to elevate the level of confidence which managers possess during their decision-making and implementation activities.

**REFERENCES**


