

# **Antecedents and Performance Consequences of Learning Success In International Joint Ventures**

**Mark A. Farrell**

School of Commerce  
Charles Sturt University  
Wagga Wagga  
NSW 2678  
AUSTRALIA  
[mfarrell@csu.edu.au](mailto:mfarrell@csu.edu.au)

**Radwan A. Kharabsheh**

School of Commerce  
Charles Sturt University

## **Abstract**

Based on a sample of 168 organisations involved in international joint ventures, (IJVs) in Malaysia, this paper investigates the antecedents and performance consequences of learning success. Data was analysed using structural equation modelling. Results suggest that a learning orientation, IJV partner mutual dependency, management control, operational experience, and prior non-IJV experience have a positive effect upon learning success. Results also suggest that prior international experience has a negative effect upon learning success, and that those organisations that are successful in learning in the IJV have higher levels of business performance.

**Keywords:** learning success, learning orientation, international joint ventures, business performance, Malaysia.

## **Antecedents and Performance Consequences of Learning Success In International Joint Ventures**

### **Introduction**

It is widely argued that international joint ventures (IJVs) provide a platform for organisational learning, providing opportunities for firms to access the skills and competencies of their partners (Kogut 1988; Westney 1988). Indeed, several authors argue that learning, knowledge acquisition and adaptation are the principal reason for the creation of international joint ventures, contributing significantly to IJV performance (Hamel, Doz and Prahalad 1989; Hamel 1991; Inkpen and Beamish 1997; Kogut and Zander 1992; Lyles and Baird 1994). That is, IJVs provide a platform for parent organisations to access each others resources and capabilities (Anand and Khanna, 2000; Grant, 1996; Hamel, 1991; Kogut, 1998). In short, the difference in partner skills and knowledge provide the catalyst for learning (Inkpen, 2000). The generally accepted argument is that IJVs provide access to new markets by leveraging the local partner's market knowledge and local networks, thus reducing risks and potentially increasing revenue, (Craig and O'Cass, 2002; Simonin, 1997). In transition economies such as Hungary and China, foreign parents normally bring in technology and 'management know-how,' and are a vital source of useful knowledge (Tsang 2002). From the foreign partners' perspective, success in learning and acquiring the local knowledge of the host country is vital for its survival and the sustenance of its competitive advantage in the market (Makino and Delios 1996).

However, while the transfer of technology and capital between partners is readily observed, it is not so apparent that knowledge has been acquired. Moreover, there is little guidance in the

literature to suggest what factors facilitate successful learning. Surprisingly few studies have examined the relationship between organisational learning and IJV business performance. The relationship between learning success and business performance is yet to be empirically established. Further, more research is needed on the performance of IJVs following the increase in the reported number of failed IJVs. Beamish and Delios (1997) reveal that an average two in five IJVs are perpetual strugglers or outright failures. Thus, understanding IJVs performance dynamics is important for foreign parents interested in establishing and maintaining IJVs outside their national borders.

Thus, the purpose of this study is twofold; (i) Firstly, we identify antecedents of learning success in IJVs. Unless the organisation understands how it can increase its learning success, little learning is likely to take place, thus negating one of the primary motivations for the IJV. In the context of this study learning success is defined as the extent to which the foreign partner achieved its learning objectives (Si 1996). (ii) Secondly, we examine the relationship between learning success and IJV business performance. Given the emphasis on learning in IJVs, the absence of a positive relationship between learning success and business performance would suggest the need to rethink the rationale for IJVs as a mode of entry.

The remainder of the paper is organised as follows: in the following section we discuss knowledge acquisition and learning in IJVs, and develop the conceptual framework and hypotheses. This is followed by the methodology, analysis of data, conclusions and implications for practice.

## **Knowledge acquisition, learning and IJVs**

Theories of incremental international expansion views foreign direct investment (FDI) motives as being related to the cumulation of international experience and the accompanying reduction in location-based disadvantages (Johanson and Vahlne 1977). Makino and Delios (1996) argue that the central idea in this research stream is that foreign firms increase their resource commitments to investments abroad as they accumulate local experience. Operational experience and the level of the firm's pool of local knowledge have been found to have had a positive effect on the level of resource commitment in FDI (Johanson and Vahlne 1977).

In internationalisation theory, argues Wai-chung Yeung, (1998, p.291), "local knowledge constitutes information and know-how about the local economy, politics, culture and business customs of a country; local demands and tastes; and how to access the local labour force, distribution channels, infrastructure, raw materials and other factors required for the conduct of business in a region." Because general knowledge usually takes the form of location-based intangible assets, its acquisition usually stems from local operating experience. However, certain forms of local knowledge are difficult to internalise by themselves through the mere accumulation of experience in a host country (Wai-chung Yeung, (1998, p. 291). This difficulty results from the fact that some forms of local knowledge are specific to particular local firms. Examples of such knowledge are a local firm's skills and capabilities to negotiate with the local government; its access to and skills in negotiating with the local elite; its ability to manage the local labour force and unions; and its competence with respect to local market access, product quality, branding, market reputation, and so forth (Makino and Delios 1996). These forms of local knowledge and skills are both location and firm-specific in nature

(Rugman and Verbeke 1992) and, due to the latter characteristic of this knowledge (firm-specificity), may not be readily acquired through the accumulation of experience or the hiring of local managers alone.

Given the above, it is argued that this type of knowledge is more easily acquired through formation of IJVs or other non-equity forms of alliances with local firms. For example, Gomes-Casseres (1989) found that access to information about the local environment was the most important criterion for US firms forming JVs with local firms. Inkpen (1992) examined US-Japanese auto-parts JVs in North America and concluded that many were formed because of complementary needs between American and Japanese firms. North American organisations desired technical and manufacturing knowledge and Japanese organisations required local knowledge. Finally, Makino (1995) found that the primary motive for alliance formation with local firms was to access local knowledge.

The need for the foreign partner to reduce the disadvantage of the lack of local knowledge of the host country, and the idea that some forms of local knowledge can only be transferred through forming a joint venture with a local partner, highlights the importance and the need to identify and understand learning success in international joint ventures. For example, several researchers have argued that learning can be an important determinant in the initial motivations for and ultimate success of international joint ventures (Doh, 2000; Hamel, 1991; Inkpen, 1996). Similarly, Kai Ming Au and Enderwick (1994) argued that the lack of local knowledge of the host country was one of the major obstacles for multinational corporations to attain success and business performance in cross border operations.

## **Learning success**

Si (1996) defines learning success as the extent to which the foreign partner achieved its learning objectives. Si (1996) identifies four antecedents of learning success in a strategic management context. These are (1) IJV's partner commitment, (2) partner's mutual dependency, (3) partner's autonomy, and (4) partner's past experience. However, Si (1996) omitted a measure of the organisations ability to learn, such as learning orientation, a concept grounded in the marketing literature and deemed relevant to learning research in general. This exclusion of learning orientation, however, results from a more generic divide between the marketing literature and the IJV literature. For example, Kandemir and Hult (2002), state that there are two streams of research that examine organisational learning and performance. The first stream lies within the strategic marketing literature and initially focused on marketing capabilities (Day 1994) and market information processing (Sinkula 1994). This stream broadened its focus to examine the effect of a market orientation combined with a learning orientation to achieve a competitive advantage (Baker and Sinkula 1999; Slater and Narver 1995) and more recently, incorporated the role of innovation constructs into this line of research (Hurley and Hult, 1998). The second stream, which is largely distinct from the strategic marketing literature, has emphasised the role of IJVs as an instrument of organisational learning. The main thrust of this research, suggests that IJVs provide a platform for parent organisations to access each other's resources and capabilities (Anand and Khanna 2000; Grant 1996; Hamel 1991; Kogut 1988). From a resource-based perspective, organisations are motivated to form IJVs for efficient development and deployment of firm resources. Other than short-term objectives of generating rents and efficient use of resources, firms may form international joint ventures in which both partners have clear learning objectives to achieve long-term competitiveness. The differences in partner skills and

knowledge provide the catalyst for learning (Inkpen 2000). Kandemir and Hult (2002, p. 430) continue to argue that “interestingly, those major elements of learning in IJVs overlap the marketing capabilities (Day 1994) and market-based learning (Slater and Narver 1995) perspective in strategic marketing.” This study addresses this separation by drawing relevant constructs from both the marketing and IJV literature in order to achieve a better understanding of learning success and performance in IJVs.

## **Conceptual Framework and Hypotheses**

### **Learning orientation**

Sinkula, Baker and Noordewier (1997, p. 309) conceptualise learning orientation as “giving rise to that set of organisational values that influence the propensity of the firm to create and use knowledge.” Learning orientation thus affects the information that an organisation attends to, interprets, evaluates, and ultimately accepts or rejects (Argyris and Schon, 1978; Dixon, 1992; Hedberg, 1981). Sinkula, Baker and Noordewier (1997) describe three organisational values routinely associated with the predisposition of the firm to learn. These values are; commitment to learning, open-mindedness, and shared vision.

### **Commitment to Learning**

According to Sinkula, Baker and Noordewier (1997, p. 309), “central to the organisation’s learning orientation is the fundamental value it holds towards learning.” This value, states Sinkula, Baker and Noordewier (1997) is pivotal to the promotion of a learning culture. If an organisation places little value on learning, little learning is likely to occur (Sackmann, 1991). In the context of IJVs, commitment to learning from the partner is crucial if the learning

objectives are to be achieved. Senge (1996) argues that it is no longer sufficient to have one person learning for the organisation, by following orders from the 'grand strategist' at the top. In order to achieve learning objectives, the commitment of management and employees to learning is required. This is supported by Yeo (2003), who found that management commitment to learning strengthens learning throughout the organisation.

Inkpen (1996) argues that top management's role in managing knowledge should be one of an architect and a catalyst. Commitment from managers is critical as their example influences how staff responds and staff tend to value what their managers value (Pettit 2004). There must be at least one strong champion of knowledge creation in a leadership position. That said, however, the importance of multiple advocates of learning and commitment of all organisational members to learning should not be underestimated. The most successful learning is one that has the commitment from everyone within the organisation, from the chief executive down (Pettit 2004).

### **Open Mindedness**

Open mindedness is similar to the notion of 'unlearning,' (Nystrom and Starbuck, 1984). As Sinkula, Baker and Noordewier (1997, p. 309), state, "unlearning is at the heart of organisational change, and open-mindedness is an organisational value that may be necessary for unlearning efforts to transpire." In the context of IJVs, open-mindedness is vital, given the significant social, cultural, and structural differences between the respective organisations. Open mindedness encourages the IJV to continually question not only the information it processes but also whether their particular approach to learning is applicable. Lane, Salk and Lyles (2001) argue that although the acquisition of knowledge and its influence over



performance may decrease over time as the IJV meets its original needs and begins to develop its own capabilities, this is less likely to be true in transitional economies. Those economies argue Lane, Salk and Lyles (2001), are marked by long periods of rapid and discontinuous change which create incentives for continued learning from foreign parents. D'Aveni (1994) makes a similar observation about hypercompetitive markets, which are also marked by rapid and discontinuous change. D'Aveni (1994) argues that this type of change requires firms to continually learn to survive, let alone thrive. Given this, open-mindedness is vital, as organisations need to continually question long-held routines, assumptions, and beliefs about the nature of the market. There is a danger that complacency may set in, and that organisations may only accept information which conforms to the conventional orthodoxy.

## **Shared Vision**

Shared vision, state Sinkula, Baker and Noordewier (1997, p. 309), “influences the direction of learning, whereas commitment and open-mindedness influence the intensity of learning.” It is widely accepted by organisational learning scholars that shared vision provides direction, harnessing the energy, commitment and focus of organisational members, Sinkula, Baker and Noordewier (1997). Without shared vision, organisational members will have no idea what to learn. This provides some support for Inkpen (1996), who found that the reasons for firms failing to capitalise and use opportunities for learning in strategic alliances were related to problems in facilitating and disseminating knowledge through the organisations. Inkpen (1996) argues that unless individual knowledge is shared throughout the organisation, the knowledge will have a limited impact on organisational effectiveness. Senge (1996) argues that a vision is a key to unlocking the power of purpose. Senge (1996) explains that a vision is a picture of the future one wants to create. A vision is powerful to the extent that it expresses

the IJV's underlying purpose. It is the vehicle for bringing purpose into the domain of acts and commitment. For the acquired knowledge to be effective, it should be put into a shared context. Galer and van der Heijden (1992) describe a shared vision as 'goal convergence.' Divergent or conflicting assumptions may undermine the ability of the members of the organisation to agree on the interpretation of knowledge of the local market, as well as knowledge of government and culture and, thus, their ability to respond quickly to emerging trends or problems.

The preceding discussion has articulated the components of a learning orientation. It is our contention that a learning orientation is vital for the foreign partner to achieve its learning objectives from the IJV. Without this direction and intensity of learning, little learning is likely to take place, and the IJV will be of limited benefit to both organisations. In short, a learning orientation is important for the foreign partner to achieve its learning success through the commitment to learning, from the ability to maintain an open-mind, and from the shared vision necessary to harness the direction of learning. Stated more formally:

*H<sub>1</sub>: The higher the degree of learning orientation of the foreign partner, the higher the level of its learning success.*

### **IJV commitment towards the local partner**

Commitment reflects the actions and values of key decision-makers regarding continuation of the relationship, acceptance of the joint goals and values of the partnership, and the willingness to invest resources in the relationship (Beamish, 1984; Mowday, Porter and Steers, 1982). A series of theoretical and empirical studies suggests that IJV partners' commitment to the IJV goals may significantly influence IJV learning success. Cullen,

Johnson, and Sakano (1995), for instance, reported that a successful IJV must involve; a fair financial commitment, commitment to support the partner, a commitment to the IJV, employees, and a commitment to understand the culture, politics and economics of the partner's country. Lane and Beamish (1990) indicated that, if each partner demonstrates these aspects of commitment, the IJV will develop based on the principle of fair exchange. Based on the premise that learning is a major organizational goal and that learning success is part of the general success of the IJV Si (1996) reported a positive relationship between IJV partner's commitment to the IJV goals and learning success. This leads to the following hypothesis:

H<sub>2</sub>: The higher the level of the IJV partner's commitment to the goals of the IJV, the higher the level of the foreign partner's learning success.

### **IJV partner's mutual dependency**

Tedeschi, Schlenker and Bonoma (1973, p.234) observed that inter-dependence represents "the degree to which one actor's behaviours, acts or other goals are dependent for the occurrence or change on the behaviours, actions or goals of one of a set of other actors." Cullen, Johnson and Sakano (1995) expanded on the previous observations and concluded that IJV mutual dependency means that companies must rely on each partner to contribute to the relationship. The relevant specifics of IJV mutual dependency may involve aspects such as resource dependency, decision making dependency, market share dependency, and goal dependency. Mutual dependency ensures symmetric contributions by the partners and hence motivates the two partners to supply their unique resources or capabilities to the IJV (Park and Ungson, 1997; Porter and Fuller, 1985). The partners see their contribution as critical to

the success of the relationship and, ultimately, to the achievement of the IJV goals, learning being among them. This is supported by Si (1996) who found that IJV partners' mutual dependency had a positive affect on IJV learning success in IJVs. This leads to the following hypothesis:

*H<sub>3</sub>: The higher the level of the IJV partner's mutual dependency, the higher the level of the foreign partner's learning success.*

## **Control**

Control can be defined as the process through which a parent company's interests are protected (Calantone and Zhao, 2001). IJV control enables the foreign partners' to participate in IJVs decision-making and to access information flows within IJVs especially the local knowledge of the host partner (Geng, 2004). Through control mechanisms, IJV control facilitates superior monitoring of IJVs activities, attenuates the leeway for opportunism, prohibits contractual hazards, and protects investing firms' intangible assets especially knowledge its assets (Oxley, 1997). Having more control over the IJV enables the foreign partner to meet its learning objectives by accessing IJV flow of knowledge and by directing the IJV activities towards the achievement of its learning goals. This is supported by Lyles and Salk (1996) who found that a lack of knowledge acquisition transfer may result when the domestic parent has the dominant equity position in IJVs. Further, it has been shown that partners, whose contribution to a joint venture is local knowledge, are consistently associated with minority ownership and lower levels of control (Blodgett, 1992). Calantone and Zhao (2001) found that higher levels of control had a positive effect on learning the local knowledge by the foreign partners in both Sino-Japanese and Sino-Korean IJVs.

*H<sub>4</sub>: The higher the degree of the foreign partner's control over the IJV, the higher the level of its learning success.*

### **Conflict between the partners in an IJV**

Conflict between the partners can be indicative of disagreement concerning goals and/or operational or managerial expectations (Cullen, Johnson and Sakano, 1995). Lyles and Salk (1996) found that parental conflicts can impede the flow of information between the parents and the IJV, and can send negative or conflicting signals to IJV employees about using either of the parents as a knowledge reference. Tsang (2001) found that conflicts between foreign and local managers in IJVs in China had a damaging impact on strategic learning and that under conflict situations the transfer of local knowledge was impeded. This leads to the following hypothesis:

*H<sub>5</sub>: The higher the level of conflict between the joint venture partners, the lower the level of the foreign partner's learning success.*

### **Experience**

Operational experience is obtained through the operation of the joint venture itself in the host country. Millington and Bayliss (1996), argue that this type of experience enables the foreign partner to acquire knowledge about the joint venture itself and both the foreign partner and the joint venture to acquire knowledge about the host country market. Tsang (2002) argued that both overseeing effort and management involvement are significant channels of knowledge acquisition. The former channel, management overseeing, he argued is more

important for firms with a great deal of operational experience in the host country and for parents of older joint ventures. Tsang (2002) concluded that this finding indicates that firms improve their skills of knowledge acquisition through learning-by-doing. Si (1996) found that higher levels of experience are positively and significantly related to learning success of the IJV. This leads to the following hypothesis:

*H<sub>6</sub>: The higher the level of operational experience of the joint venture in the host country, the higher the level of the foreign partner's learning success.*

Previous non-JV experience is defined as the experience resulting from the foreign partner firm having a previous experience and commitment to the host country market that is not a joint venture arrangement. The previous commitment may range from licensed production through exports, agency and sales subsidiary. Higher previous non-JV experience is associated with increases in market knowledge, where market knowledge incorporates the language and culture of the host country, the financial environment and the structure of the market. Newbould, Buckley and Thurwell (1988) argued that the success of the IJVs is positively related to both market experience and previous non-JV experience. Millington and Bayliss (1997) also found that IJVs which are preceded by experience in the market are more likely to succeed than investments which are undertaken without prior experience in the market. This leads to the following hypothesis:

*H<sub>7</sub>: The higher the levels of the foreign partner's previous non-JV experience in the host country, the higher the level of its learning success.*

International experience in this context refers to the transferable benefits, which result from operating IJVs in other international markets outside Malaysia. Millington and Bayliss

(1997) argue that these benefits stem from: the firm's experience of marketing and distributing its product in a different foreign market where customer similarities exist, the benefit from direct experience of the managerial problems associated with the formation and control of IJVs and, the benefit from the managerial systems which multinational firms have developed to control and administer the whole of their international operations (Fayerweather, 1978; Stopford and Wells, 1972). However, while the transferability of these benefits across different locations is possible, there is little evidence to suggest that international experience enhances the local knowledge acquisition of the host country. Several researchers argued that cultural and local factors dominate the location decision (Millington and Bayliss, 1991; 1995), and firm-specific advantages which are based on advertising are difficult to exploit across national boundaries (Caves, 1981). Makino and Delios (1996) found that where the foreign partner is involved in a joint venture with a local partner from the host country, international experience was found to have a negative effect on learning and local knowledge acquisition. Chang and Rosenzweig (2001) found that the importance of prior international experience would diminish after initial entry. Their results indicated that the effect of prior international experience was negative and significant for both acquisition and joint venture after the initial entry was made. This leads to the following hypothesis:

*H<sub>8</sub>: The higher the level of the foreign partner's international experience outside Malaysia, the lower the level of its learning success.*

### **Control variables - Size**

Yadong (2002) found that, for MNC's investing in emerging markets, capability exploitation and learning are a positive function of investment size in the host country. Tsang (1999) argued that as organisations mature and grow in size, individuals fall into patterns of

interaction and communication. This creates a process of institutionalisation which becomes a means for organisations to overcome structural barriers, resulting from the growth in size, and allows the organisation to leverage the learning of individual members (Crossan, Lane and White, 1999). When organisations are big enough they are capable to overcome these barriers and, therefore, achieve better sharing of experiences and learning (Tsang, 2002). This leads to the following hypothesis:

*H<sub>9</sub>: The larger the IJV, the higher the level of the foreign partner's learning success.*

### **Learning success and IJVs business performance**

Si (1996) equated learning success, strategic success, performance and organisational effectiveness. This study distinguishes between learning success and performance. This study considers learning success and local knowledge acquisition to be closely linked (Lyles and Salk 1996). This implies that acquiring the local knowledge of the host country is identical to meeting the learning goals that encompass the local knowledge of that host country. Among the objectives of the current study is to examine the relationship between high levels of learning success and IJV business performance. Hence, the current study goes a step further than Si's (1996) study by arguing that higher levels of learning success lead to higher levels of IJV business performance.

Studies conducted on international joint ventures between firms from developed and developing countries show that successful acquisition and learning of local knowledge of the host country is positively related to performance from the foreign partner perspective. For example, Lane, Salk and Lyles (2001) argue that the relationship between learning performance and IJV business performance has long been assumed to exist. Lyles and Salk



(1996) also found evidence for this link in young IJVs in Hungary. Luo (1999), in a survey of 178 foreign firms in China, found that the acquisition of technological, organisational and marketing skills, as well as knowledge of the local environment by the foreign firms, enhanced their financial return and overall performance. Makino and Delios (1996) surveyed 558 Japanese joint ventures located in Southeast and East Asia, and found that partnering with local firms can be a primary strategy for accessing local knowledge and that the acquisition of local knowledge through joint venture strategy improved joint venture performance. Kai Ming Au and Enderwick (1994) argue that the lack of local knowledge of the host country is one of the major obstacles for MNCs to attain success and business performance in cross-border operations. Hence, this study expects to find a positive relationship between learning success and performance. Stated more formally:

*H<sub>10</sub>: The higher the level of the foreign partner's learning success, the higher the level of IJV business performance*

## **Methodology**

### **Data collection**

This study collected data from IJVs in Malaysia. In 2004, FDI in Malaysia, of which IJVs is a principal component, had increased by 35 per cent to reach US\$4.1 billion (Jayasankaran 2004). A database was compiled comprising 545 IJV's operating in the Klang Valley region. The IJVs surveyed originated from five developed countries; Australia, Germany, Japan, U.K and U.S.A. The study used a questionnaire survey. An initial telephone conversation outlined the study. Depending upon the level of interest from potential participants, an appointment was sought with the foreign CEO. When the foreign CEO was not available the next highest

foreign manager was asked to complete the questionnaire. At the appointment the manager was presented with a formal covering letter explaining the objectives of the study, assuring the manager of the nature of use of the data collected. The manager was assured that his identity and the identity of his organisation were to remain confidential and anonymous. The questionnaire was collected upon completion of the meeting, or later in the afternoon of the same day. In total 168 questionnaires were collected, giving a raw response rate of 30.8 percent. Out of the 168 IJV's that responded 45 percent (75 IJV's) were in the services sector and 55 percent (93 IJV's) were in the manufacturing sector.

## **Measures**

Learning success was measured by nine items developed by Si (1996). Learning orientation was measured by 18 items developed by Baker and Sinkula (1999). Commitment was measured by eight items developed by Cullen, Johnson and Sakano (1995). Mutual dependency was measured by five items developed by Barclay (1991) and Moorman, Zaltman and Deshpande (1992). Control and conflict were measured by 16 items developed by Cullen, Johnson and Sakano (1995). Operational experience, previous non-JV experience and international experience were all measured by actual years. The measure for business performance is adapted from Slater and Narver (2000) and Baker and Sinkula (1999). The measure has been used extensively in research (Baker and Sinkula 1999; Farrell and Oczkowski 2002; Lane, Salk and Lyles 2001; Lyles and Salk 1996; Slater and Narver 2000). For the first dependent variable, learning success, there was one control variable only: size which was measured by the number of persons employed by the joint venture (Anderson 1990; Crossan, Lane and White 1999; Tsang 2002; Zeira and Shenkar 1990). For the second dependent variable, performance, there were several control variables: relative size, which is

defined as the size of an organisation's sales revenue in its principal served market segment compared to that of its largest competitor (Narver and Slater 1990); relative cost, which is defined as an organisation's average total operating costs (administrative, production, rent, marketing and sales) in relation to that of its largest competitor in its principle served market segment, (Narver and Slater 1990; Slater and Narver 1994; Greenley 1995); ease of entry, which is defined as the likelihood of new entrants earning satisfactory profits within three years after entry in the organisation's principal served market segment (Porter 1980; Narver and Slater 1990); supplier power, which is defined as the extent to which an organisation is able to negotiate lower prices from its sources of supply (Narver and Slater 1990); buyer power, which is defined as the extent to which customers of the organisation are able to negotiate lower prices from it (Porter 1980; Narver and Slater 1990); market growth, which defined as the estimated annual rate of change of market size in the organisation's principal served market segment over the last three years (Narver and Slater 1990) and competitive intensity, which is defined as the behaviour, resources and ability of competitors to differentiate (Slater and Narver 1990).

### **Data Analysis**

Based on recent studies in the marketing literature (Siguaw, Simpson and Baker, 1998; Hurley and Hult, 1998), a scale validation procedure was accomplished using (1) the analysis of item inter-correlations, (2) the analysis of item-total correlations, (3) confirmatory factor analysis (CFA). The purpose of this procedure was to 'identify and eliminate poorly performing items for the reflective measures' (Siguaw, Simpson and Baker, 1998, p.104). Next, we followed the procedure of Noble and Mokwa (1999) and performed a series of separate CFA on the construct measures and related items using EQS program. In general, the properties of the measures were acceptable, with all the measures having overall acceptable fit

indices (see Tables 1 and 2). In order to establish discriminate validity the study examined the variance extracted (AVE) by the different constructs. The AVE by a construct is a measure that reflects the overall amount of variance in the indicators accounted for by the latent construct (Hair *et. al.*, 1998, p. 612). Guidelines suggest that the AVE value should exceed .50 for a construct. The average variance extracted for the different measures used in this study was greater than .5 for most constructs. However, learning orientation and mutual dependency had AVE values less than .50 in which case the study utilised a test by Fornell and Larker (1981) to establish discriminate validity of these two constructs. In this test, a construct is empirically distinct if the average variance extracted by the construct's items is greater than the construct's shared variance with every other construct (that is the square root of the inter-correlation). For example, applying the test to learning orientation shows that the construct demonstrates discriminate validity because its average variance extracted (.457) is greater than the square of its correlations with commitment (.202\*.202=.041), need (.227\*.227=.052), decision-making control (.208\*.208=.043), conflict (.220\*.220=.048), performance (.328\*.328=.128), and competitive intensity (-.038\*-.038=.001). The test is applied to all constructs with all of the constructs proving to be distinct; hence, demonstrating discriminate validity. The results for all the constructs are exhibited in Table 3.

## Results

After establishing the reliability and validity of the different measures and constructs of the study, the full model was assessed using SEM. The technique chosen was maximum likelihood (robust), given the non-normality of some of the measures. Fit indices suggest that the fit of the overall model to the data is good, CFI=0.905, Robust CFI=0.910, Bentler Bonnet Non-Normal Fit Index=0.897, GFI=0.775,  $\chi^2/df$  ratio=1.519, Standardised RMR 0.080, and

RMSEA=0.056 which are all greater than the acceptable values suggested by Kline (1998).

The parameters' estimates from the causal paths are shown in Table 4.

As hypothesised in H<sub>1</sub>, learning orientation had a positive effect on learning success ( $b=.289$ ,  $p<.05$ ). No support was found for H<sub>2</sub> which, hypothesised that the IJV partner's commitment to the goals of the IJV had a positive effect on learning success. As hypothesised, support was found for both H<sub>3</sub> that the foreign IJV partner's mutual dependency had a positive effect on learning success ( $b=.258$ ,  $p<.05$ ) and H<sub>4</sub> that the management control over the IJV had positive effect on learning success ( $b=.304$ ,  $p<.05$ ). No support was found for H<sub>5</sub> which hypothesised that conflict had a negative effect on learning success. Support was found for H<sub>6</sub> which hypothesised that operational experience had a positive effect on learning success ( $b=.191$ ,  $p<.05$ ), and for H<sub>7</sub> which hypothesised that prior non-JV experience in Malaysia had a positive effect on learning success ( $b=.154$ ,  $p<.05$ ) and for H<sub>8</sub> which hypothesised that international experience had a negative effect on learning success ( $b=-.124$ ,  $p<.10$ ). No support was found for H<sub>9</sub> which hypothesised that the size of the IJV had a positive effect on learning success. Finally, support was found for both H<sub>10</sub> which hypothesised that learning success had a positive effect on IJV business performance ( $b=.166$ ,  $p<.05$ ). In the following section, we present the conclusions of the study.

## Conclusions

Although there is a great deal of literature investigating technological and managerial knowledge learnt from the foreign partners in IJV's there is little literature that investigates host country local knowledge learnt by the foreign partner (Tsang 2002). In addition there is a dearth of research regarding antecedents of learning success. The only model, that of Si

(1996) ignored important learning constructs such as learning orientation. The decision to form an IJV is based upon the premise that it provides the respective organisations' with opportunities to access each others' resources and capabilities (Anand and Khanna, 2000; Grant, 1996; Hamel, 1991; Kogut, 1988). As Inkpen (2000) argues, the differences in partner skills and knowledge provide the catalyst for learning. Kandemir and Hult (2005, p. 431) state, "from a knowledge standpoint, a theoretical objective of the IJV is to transfer organisationally embedded knowledge, or 'tacit knowledge' between the parent organisations, (c.f. Nelson and Winter, 1982; Nonaka, 1994; Polanyi, 1967).

For organisations to succeed in their learning goals, the organisational 'learning culture' (Kandemir and Hult (2005), needs to, at a minimum, consist of commitment to learning, shared vision and open-mindedness. Consistent with prior theorising in organisational learning, (Kandemir and Hult, 2005; Sackman, 1991; Senge, 1996; Yeo, 2003), we hypothesised that a learning orientation would have a positive effect upon the IJV learning success. Results support this hypothesis. For organisations that wish to achieve their learning goals in an IJV, the level of learning orientation is an important predictor of learning success. More specifically, the foreign parent needs to demonstrate a commitment to learning from the foreign. If the parent places little value on learning, then little learning is likely to occur, (Norman, 1985; Sackman, 1991). Similarly, Galer and van der Heijden, (1992, p. 11), state that a "culture amenable to learning" is a prerequisite of its ability to learn from the foreign partner.

Aside from a commitment to learning, organisations need to have a high degree of 'open-mindedness' (Sinkula, Baker and Noordewier, 1997). This is critical where organisations operate in markets with differing customs and practices. As Sinkula, Baker and Noordewier,

(1997, p. 309), state, “open-mindedness is an organisational value that maybe necessary for unlearning efforts to transpire.” Similarly, organisations must have a shared vision. Unlike commitment to learning and open-mindedness, that influence the intensity of learning, shared vision influences the direction of learning, (Sinkula, Baker and Noordewier, 1997). Shared visions provide a focus for learning that fosters energy, commitment and purpose among members, (Day, 1994). In the complexities of an IJV, the need for a shared vision is crucial, otherwise organisational members will find it difficult to know what to learn, Sinkula, Baker and Noordewier, (1997, p.309). In short, our results strongly suggest that the learning orientation of the organisation is important for those organisations seeking to learn in the IJV.

Contrary to expectations, our result suggests that the commitment to the goals of the IJV does not affect the level of the foreign partners learning success. This result is surprising given that previous studies (Cullen, 1995; Lane and Beamish, 1990) suggest that commitment is an important factor in IJV relationships. It may be the case that commitment to the goals of the IJV does not capture the commitment to learning. This point is speculative and needs to be investigated further.

As hypothesised, our results suggest that IJV partners’ mutual dependency had a positive effect on the level of the foreign partner’s learning success. This support previous work, (Si, 1996) and further strengthens the argument that mutual dependency ensures that both parties have common goals, learning being one such goal. Similarly, consistent with Calantone and Zhao, (2001) our results support the proposition that higher levels of control of the foreign parent over the IJV can assist in a variety of learning related activities, such as accessing information flows.

Our findings also support the notion that higher levels of operational experience of the joint venture in the host country will increase the foreign partners' learning success, and that higher levels of previous non joint venture experience in the host country will have a similar effect. In short, operational experience of the IJV creates learning opportunities and experience of operating in the host country also provides greater experience from which to successfully learn.

However, although experience within the host country has a positive effect on learning success, our results support the proposition that prior experience outside of the host country would have a negative effect on learning success. These support previous findings (Makino and Delios, 1996; Chang and Rosenzeig, 2001). Also, contrary to previous studies, (Crossan, Lane and White, 1999; Tsang, 2002), we did not find any effect for the size of the IJV and the level of the foreign partners' learning success. Finally, consistent with our expectations and previous arguments, (Kai Ming and Enderwick, 1994; Lane, Salk and Lyles, 2001; Lyles and Salk, 1996; Luo, 1999; Makino and Delios, 1996), our results suggest that learning success has a strong and positive effect upon business performance.

### **Implications for Practice**

There are several implications for the results of this study. Foreign managers should emphasise knowledge values thorough the IJV's. A commitment to learning ensures that learning is taking place by all members of the IJV from the CEO down through ensuring an effective knowledge sharing. A shared vision ensures that individuals are more likely to have goal convergence, thus reducing potential conflicts. Open mindedness ensures that existing knowledge is not taken for granted and that employees who think 'outside the box' are



rewarded. Secondly, foreign managers should exert maximum control over the IJV operation in order to tailor the policies towards their learning needs and have access to the flow of knowledge through the IJV. Further, the more control the foreign partner has over the IJV the less likely conflicts will arise which focuses efforts on the important task of learning. Finally, in regards to international experience foreign managers should not have excessive reliance on international experience in learning the local knowledge of the host country. In doing so the foreign managers may face the risk of relying on irrelevant and obsolete knowledge which in turn may jeopardise the success of the IJV. Foreign managers should enter new host country markets with an open mind set, and must be aggressive in regards to local knowledge acquisition.

## References

- Anderson, E. (1990) 'Two Firms, One Frontier: On Assessing Joint Venture Performance', *Sloan Management Review*, 31(2): 19-30.
- Anand, B.N., and Khanna, T., (2000), 'Do Firms Learn to Create Value? The Case of Alliances', *Strategic Management Journal*, 21, 295-315.
- Argyris, C. and Schon, D.A. (1978) *Organisational Learning: A Theory of Action Perspective*, Addison-Wesley: MA.
- Baker, W.E. and Sinkula, J.M. (1999) 'The Synergistic Effect of Market Orientation and Learning Orientation on Organisational Performance', *Academy of Marketing Science Journal*, 27(4): 411-428.
- Barclay, D.W. (1991) 'Interdepartmental Conflict in Organisational Buying: The Impact of the Organisational Context', *Journal of Marketing Research*, 28(2): 145-160.
- Beamish, P.W. (1984) 'Joint Venture Performance in Developing Countries' Unpublished Ph.D. Dissertation, The University of Ontario, Ontario.
- Beamish, P. W. (1993) 'The Characteristics of Joint Ventures in the People's Republic of China', *Journal of International Marketing*, 1(2): 29-49.
- Beamish, P.W. and Delios, A. (1997) 'Incidence and Propensity of Alliance Formation', in P.W. Beamish and P. Killing (eds.) *Co-operative Strategies: Asian Pacific Perspectives*, San Francisco, CA: The New Lexington Press.
- Blodgett, L.L. (1992) 'Factors in the Instability of International Joint Ventures: An Event History Analysis', *Strategic Management Journal*, 13: 475-481.
- Calantone, R.J. and Zhao, Y.S. (2001) 'Joint Ventures in China: A Comparative Study of Japanese, Korean, and U.S. Partners', *Journal of International Marketing*, 9(1): 1-24.
- Caves, R.E. (1981) 'Diversification and Seller Concentration: Evidence from Change', *Review of Economics and Statistics*, 63: 289-293.
- Chang, S. and Rosenzweig, P. (2001) 'The Choice of Entry Mode in Sequential Foreign Direct Investment', *Strategic Management Journal*, 22(8): 747-776.
- Craig, C.J., and O'Cass, A., (2002), 'Examining the Internal-External Determinants of International Joint Venture (IJV) Marketing Performance in Thailand', *Australasian Marketing Journal*, 10(2) 55-71.
- Crossan, M.M., Lane, H.W. and White, R.E. (1999) 'An Organisational Learning Framework: From Intuition to Institution', *Academy of Management Review*, 24(3): 522-538.

Cullen, J.B., Johnson, J.L., and Sakano, T. (1995) 'Japanese and Local Partner Commitment to IJVs: Psychological Consequences of Outcomes and Investments in the IJV Relationship', *Journal of International Business Studies*, 26(1): 91-116.

D'Aveni, R.A. (1994) *Hyper competition*, Free Press: New York.

Day, G.S. (1994) 'Continuous Learning about Markets', *California Management Review*, 36(Summer): 9-31.

Dixon, N.M. (1992) 'Organisational Learning: A Review of the Literature with Implications for HRD Professionals', *Human Resource Development Quarterly*, 3(Spring): 29-49.

Doh, J.P. (2000) 'Entrepreneurial Privatisation Strategies: Order of Entry and Local Partner Collaboration as Sources of Competitive Advantage', *The Academy of Management Review*, 25(3): 551-572.

Fayerweather, J. (1978) *International Business Strategy and Administration*, Ballinger Publishing: MA.

Farrell, M.A. and Oczkowski, E. (2002) 'Are Market and Learning Orientation Necessary for Superior Organisational Performance? *Journal of Market-Focused Management*, 5: 197-217.

Fornell, C. and Larcker, D.F. (1981) 'Evaluating Path Analysis Models with Unobservable Variables and Measurement Error', *Journal of Marketing Research*, 18 (Feb.): 39-50.

Galer, G. and van der Heijden, K. (1992) 'The Learning Organisation: How Planners Create Organisational Learning', *Marketing Intelligence and Planning*, 10(6): 5-12.

Geng, L. (2004) 'Ownership and International Joint Ventures' Level of Expatriate Managers', *Journal of American Academy of Business*, 4(1/2): 75.

Gomes-Cassares, B., (1989), 'Joint Ventures in the Face of Global Competition,' *Sloan Management Review*, 17(Spring), 17-26.

Grant, M.R., (1996), 'Towards a Knowledge-based Theory of the Firm, *Strategic Management Journal*, 17, 109-122.

Greenley, G. (1995) 'Market Orientation and Company Performance: Empirical Evidence', *British Journal of Management*, 40: 33-46.

Hamel, G. (1991) 'Competition and Competence for and Interpartner: Learning within International Strategic Alliances', *Strategic Management Journal*, 12(special issue/Summer): 83-108.

Hamel, G., Doz, Y. and Prahalad, C.K. (1989) 'Collaborate with Your Competitors, and Win', *Harvard Business Review*, 67: 133-39.

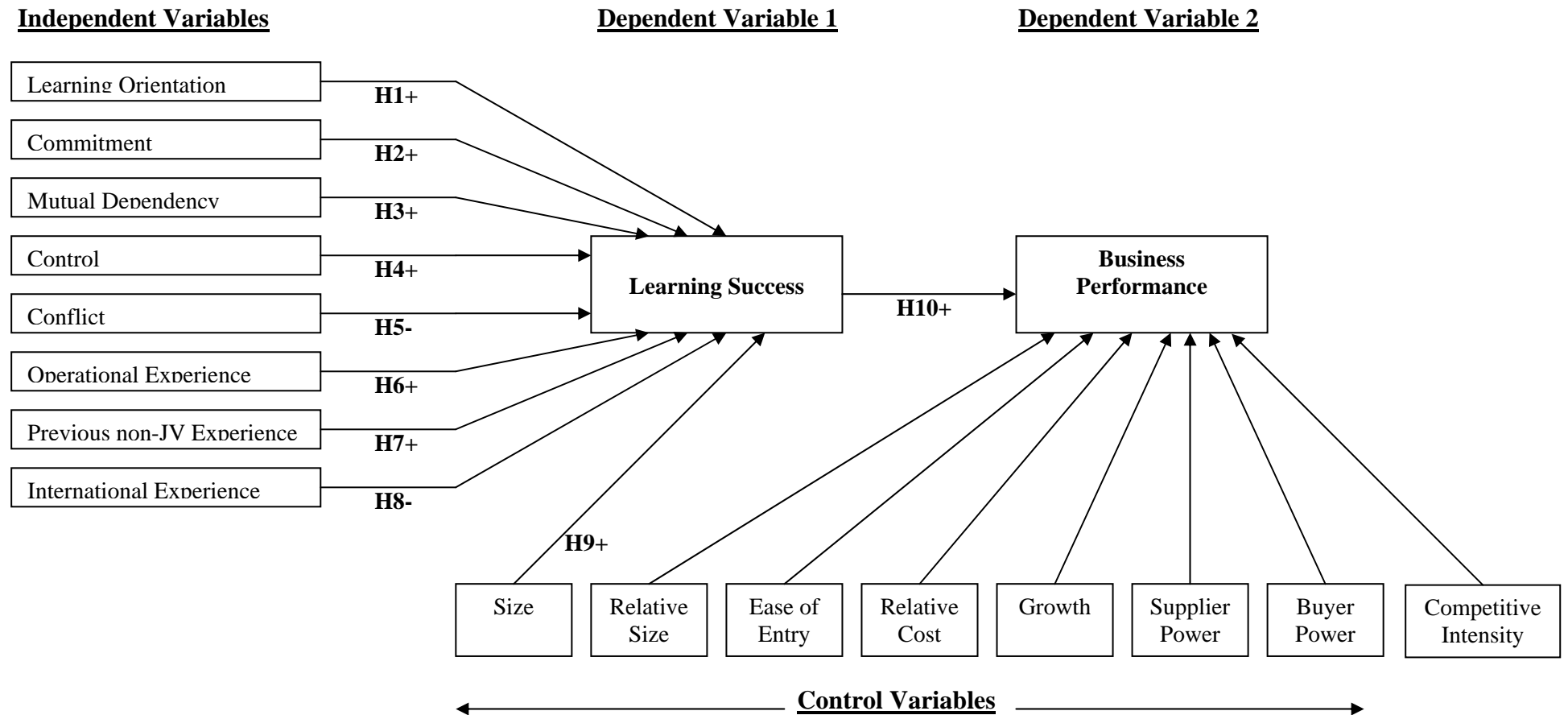
- Hedberg, B. (1981) 'How Organisations Learn and Unlearn', in P.C. Nystrom and W.H. Starbuck (eds.) *Handbook of Organisational Design*, New York: Oxford University Press, pp 3-27.
- Hurley, R.F. and Hult, G.T.M. (1998) 'Innovation, Market Orientation, and Organisational Learning: an Integration and Empirical Examination', *Journal of Marketing*, 62(3): 42-54.
- Inkpen, A.C. (1992) 'Learning and Collaboration: An Examination of North American-Japanese Joint Ventures,' Unpublished PhD Dissertation, Wester Business School.
- Inkpen, A.C. (1996) 'Creating Knowledge through Collaboration', *California Management Review*, 39(1):123- 141.
- Inkpen, A.C. and Beamish, P.W. (1997) 'Knowledge, Bargaining Power, and the Instability of International Joint Ventures', *The Academy of Management Review*, 22(1): 177-203.
- Inkpen, A.C., (2000), 'Learning and Knowledge Acquisition through Strategic Alliances,' *Academy of Management Review*, 12(4), 69-90.
- Jayasankaran, S. (2004) 'Asia's Rising Star', *Far Eastern Economic Review*, 167(17): 48-51.
- Johanson, J. and Vahlne, J. (1977) 'The Internationalisation Process of the Firm – A Model of Knowledge Development and Increasing Market Commitments', *Journal of International Business Studies*, 8(1): 23-32.
- Kandemir, D. and Hult, G.T.M., (2004), 'A Conceptualization of Organizational Learning Culture in International Joint Ventures,' *Industrial Marketing Management*, 34, 430-439.
- Kai Ming Au, A. and Enderwick, P. (1994) 'Small Firms in International Joint Ventures in China: The New Zealand experience', *Journal of Small Business Management*, 32(2): 88-95.
- Kogut, B. (1988) 'Joint Ventures: Theoretical and Empirical Perspectives', *Strategic Management Journal*, 9(4): 319-332.
- Kogut, B. and Zander, U. (1992) 'Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology', *Organisation Science*, 3(3): 383-97.
- Lane, H.W. and Beamish, P.W. (1990) 'Cross-Cultural Cooperative Behaviour in Joint Ventures in LDCs', *Management International Review*, 30(Special Issue): 87-102.
- Lane, P., Salk, J.E. and Lyles, M.A. (2001) 'Absorptive Capacity, Learning, and Performance in International Joint Ventures', *Strategic Management Journal*, 22(12):1139-.1161
- Luo, Y. (1999) 'The Structure-Performance Relationship in a Transitional Economy: An Empirical Study of Multinational Alliances in China', *Journal of Business Research*, 46: 15-30.
- Lyles M.A. and Baird, I.S. (1994) 'Performance of International Joint Ventures in Two Eastern European Countries: The Case of Hungary and Poland', *Management International Review*, 34(4): 313-330.

- Lyles, M.A. and Salk, J.E. (1996) 'Knowledge Acquisition from Foreign Parents in International Joint Ventures: An empirical examination in the Hungarian context', *Journal of International Business*, 27(5): 877-904.
- Makino, S., (1995) 'Joint Venture Ownership Structure and Performance: Japanese Joint Ventures in Asia,' Unpublished PhD Dissertation, University of Western Ontario.
- Makino, S. and Delios, A. (1996) 'Local Knowledge Transfer and Performance: Implications for Alliance Formation in Asia', *Journal of International Business Studies*, 27(5): 905-928.
- MIDA Malaysian Industrial Development Authority 2004, home page, viewed 5 July 2004, <http://www.mida.org/>.
- Millington, A.I. and Bayliss, B.T. (1990) 'The Process of Internationalisation: UK Companies in the EC', *Management International Review*, 30(2): 151-162.
- Millington, A.I. and Bayliss, B.T. (1991) 'Non-Tariff Barriers and U.K. Investment in the European Community', *Journal of International Business Studies*, 22(4): 695-711.
- Millington, A.I. and Bayliss, B.T. (1995) 'Transnational Joint Ventures between UK and EU Manufacturing Companies and the Structure of Competition', *Journal of International Business Studies*, 26(2): 239-255.
- Millington, A.I. and Bayliss, B.T. (1996) 'Corporate Integration and Market Liberalisation in the EU', *European Management Journal*, 14: 139-50.
- Millington, A.I. and Bayliss, B.T. (1997) 'The Strategy of Internationalisation and the Success of UK Transnational Manufacturing Operations in the European Union', *Management International Review*, 37(3): 199-122.
- Moorman, C., Zaltman, G. and Deshpande, R. (1992) 'Relationship Between Providers and Users of Market Research: The Dynamics of Trust Within and Between Organisations', *Journal of Marketing Research*, 29(3): 314-329.
- Mowday, R.T., Porter, L.W. and Steers, R. (1982) *Employee-Organisation Linkages: The Psychology of Commitment, Absenteeism, and Turnover*, Academic Press: New York.
- Narver, J.C. and Slater, S.F. (1990) 'The Effect of a Market Orientation on Business Profitability', *Journal of Marketing*, 54 (4): 20-35.
- Nelson, R.R., and Winter, S. (1982), 'An *Evolutionary Theory of Economic Change*,' Cambridge, MA: Harvard University Press.
- Newbould, G.D., Buckley, P.J. and Thurwell, J.C. (1988) *Foreign Direct Investment by Smaller UK Firms*, Macmillan: London.
- Noble, C.H. and Mokwa, M.P. (1999) 'Implementing Marketing Strategies: Developing and Testing a Management Theory', *Journal of Marketing*, 63(4): 57-73.

- Nonaka, I. (1994) 'A Dynamic Theory of Organisational Knowledge Creation', *Organisation Science*, 5(1): 100-130.
- Nystrom, P.C. and Starbuck, W. (1984) 'To Avoid Organisational Crises, Unlearn', *Organisational Dynamics*, 13 (Spring): 53-65.
- Oxley, J. (1997) 'Appropriability Hazards and Governance in Strategic Alliances: A Transaction Cost Approach', *Journal of Law, Economics, and Organisation*, 13(2): 387-407.
- Park, S.H. and Ungson, G.R. (1997) 'The Effect of National Culture, Organisational Complementarity, and Economic Motivation on Joint Venture Dissolution', *Academy of Management Journal*, 40(2): 279-308.
- Pettit, L. (2004) 'Make Light Work of Learning', *Personnel Today*, 22-24.
- Polanyi, M. (1967) *The Tacit Dimension.* New York: Doubleday.
- Porter, L.M. (1980) *Competitive strategy: Techniques for analysing industries and competitors*, The Free Press: New York.
- Porter, M. and Fuller, M. (1985) 'Coalitions and Global Strategy' in M. Porter (ed.) *Competition in Global Industries*, Harvard Business School Press, MA: Cambridge.
- Rugman, A.M. and Verbeke, A. (1992) 'A Note on the Transnational Solution and the Transaction Cost Theory of Multinational Management', *Journal of International Business Studies*, 23, 761-71.
- Sackmann, S.A. (1991) *Cultural Knowledge in Organisations*, Sage: CA.
- Senge, P.M. (1996) 'Systems Thinking', *Executive Excellence*, 13(1): 15-17.
- Si, S.X. (1996) 'Strategic Success in Sino-American International Joint Ventures: The Effects of Organisational Learning', UMI: MI.
- Siguaw, J.A., Simpson, P.M. and Baker, T.L. (1998) 'Effects of Supplier Market Orientation on Distributor Market Orientation and the Channel Relationship: The Distributor Perspective', *Journal of Marketing*, 62(July): 99-111.
- Simonin, J.M. (1997) 'The Importance of Collaborative Know-How: An Empirical Test of the Learning Organisation', *Academy of Management Journal*, 40(5): 1150-1175.
- Sinkula, J.M. (1994) 'Market Information Processing and Organisational Learning', *Journal of Marketing*, 58(1): 35-46.
- Sinkula, J.M., Baker, W.E. and Noordewier, T. (1997) 'A Framework for Market-Based Organisational Learning: Linking Values, Knowledge, and Behavior', *Academy of Marketing Science. Journal*, 25(4): 305-319.

- Slater, S.F. and Narver, J.C. (1994) 'Does Competitive Environment Moderate Market Orientation-Performance Relationship?' *Journal of Marketing*, 58(1): 46-55.
- Slater, S.F., and Narver, J.C. (1995), "Market Orientation and the Learning Organisation," *Journal of Marketing*, 59(July), 63-74.
- Slater, S.F. and Narver, J.C. (2000) 'The Positive Effect of a Market Orientation on Business Profitability: A Balanced Replication', *Journal of Business Research*, 48: 69-73.
- Stopford, J.M. and Wells, T.L. (1972) *Managing the Multinational Enterprise: Organization of the Firm and Ownership of the Subsidiaries*, New York Basic Books: New York.
- Tedeschi, J.T., Schlenker, B. and Bonoma, T. (1973) *Conflict, Power and Games*, Aldine: Chicago.
- Tsang, E.W.K. (1999) 'Internationalisation as a Learning Process: Singapore MNCs in China', *Academy of Management Executive*, 13(1): 91-101.
- Tsang, E.W.K. (2001) 'Managerial Learning in Foreign-Invested Enterprise in China', *Management International Review*, 14(1): 29-52.
- Tsang, E.W.K. (2002) 'Acquiring Knowledge by Foreign Partners for International Joint Ventures in a Transition Economy: Learning-by-Doing and Learning Myopia', *Strategic Management Journal*, 23(9): 835.
- Wai-chung yeung, H. (1998) 'Capital, State and Space: Contesting the Borderless World,' *Transactions of the Institute of British Geographers*, 23(3), 291-309.
- Westney, D.E. (1988) 'Domestic and Foreign Learning Curves in Managing International Cooperative Strategies', in F.J. Contractor and P. Lorange (eds.) *Cooperative Strategies in International Business*, Lexington, Mass: Lexington.
- Yadong, L. (2002) 'Capability Exploitation and Building in Foreign Market: Implications for Multinational Enterprises', *Organisational Science*, 13(1): 48-64.
- Yeo, R. (2003) 'Linking Organisational Learning to Organisational Performance and Success: Singapore Case Study', *Leadership and Organisations*, 24(1/2): 70-84.
- Zeira, Y. and Shenkar, O. (1990) 'Interactive and Specific Parent Characteristics: Implications for Management and Human Resources in International Joint Ventures', *Management International Review*, 30: 7-23.

**Figure 1: Conceptual framework of the study**







**Table 1: Descriptive statistics and construct correlations**

		Mean	Standard Deviation	1	2	3	4	5	6	7
1.	Learning Orientation	5.052	1.261	<b>.8564</b>						
2.	IJV Partner Commitment	3.118	1.874	-.202 (-2.202)	<b>.5942</b>					
3.	IJV Partner Mutual Dependency	5.402	1.321	.227 (2.343)	-.237 (-2.727)	<b>.7743</b>				
4.	Decision-Making Control	4.959	1.336	.208 (2.268)	.121 (1.410)	-.166 (-1.843)	<b>.8821</b>			
5.	Conflict	2.653	1.421	-.220 (-2.509)	.268 (3.426)	.085 (.962)	-.238 (-2.989)	<b>.9539</b>		
6.	Performance	4.503	1.382	.328 (3.743)	-.171 (-2.000)	.213 (2.383)	.074 (.844)	-.272 (-3.442)	<b>.8611</b>	
7.	Competitive Intensity	4.211	1.573	.038 (0.462)	-.086 (-1.190)	-.043 (-.519)	-.090 (-1.098)	.092 (1.168)	.043 (.519)	<b>.7717</b>

Cronbach Alphas are on the diagonal.

**Table 2: Measurement properties**

	<b>Learning Orientation</b>	<b>IJV Partner Commitment</b>	<b>IJV Partner Mutual Dependency</b>	<b>Decision- making Control</b>	<b>Conflict</b>	<b>Performance</b>	<b>Competitive Intensity</b>
Average Variance Extracted	.457	.543	.474	.526	.587	.548	.872
CFI	.920	.985	.988	.987	.874	.987	.861
Robust CFI	.902	.988	1.000	.996	.888	.989	.774
GFI	.903	.976	.988	.964	.783	.979	.595
Standardised RMR	.071	.032	.026	.031	.055	.029	.048
RMSEA	.115	.077	.081	.053	.130	.075	.202
Satorra-Bentler Scaled	92.739	8.010	1.788	15.758	201.895	6.672	392.487
Chi-Square	108.873	9.953	4.167	20.605	341.724	9.613	783.822
Degrees of Freedom	66	5	2	21	90	10	120
P value	.001	.077	.125	.112	.001	.087	.001

**Table 3 Results of Fornell and Larcker Test**

AVE	Construct	Shared variance with every other construct (that is the square root of the inter-correlation)	Compare shared variance with AVE
.457	Learning Orientation	IJV Partner Commitment	.041 < .457
		.202*.202 = .041	
		IJV Partner Mutual Dependency	.052 < .457
		.227*.227 = .052	
		Decision Making Control	.043 < .457
		.208*.208 = .043	
		Conflict	.048 < .457
		.220*.220 = .048	
		Performance	.108 < .457
		.328*.328 = .108	
		Competitive Intensity	.001 < .457
		.038*.038 = .001	
.543	IJV Partner Commitment	IJV Partner Mutual Dependency	.056 < .543
		.237*.237 = .056	
		Decision Making Control	.015 < .543
		.121*.101 = .015	
		Conflict	.072 < .543
		.268*.268 = .072	
		Performance	.029 < .543
		.171*.171 = .029	
		Competitive Intensity	.005 < .543
		.068*.068 = .005	
.474	IJV Partner Mutual Dependency	Decision Making Control	.028 < .474
		.166*.166 = .028	
		Conflict	.007 < .474
		.085*.085 = .007	
		Performance	.045 < .474
		.213*.213 = .045	
		Competitive Intensity	.002 < .474
		.043*.043 = .002	
.526	Decision Making	Conflict	.057 < .526
		.238*.238 = .057	
		Performance	.005 < .526
		.074*.074 = .005	
		Competitive Intensity	.008 < .526
		.090*.090 = .008	
.587	Conflict	Performance	.074 < .587
		.272*.272 = .074	
		Competitive Intensity	.008 < .587
		.092*.092 = .008	
.548	Performance	Competitive Intensity	.002 < .548
		.043*.043 = .002	

**Table 4: Analysis of structural model**

Hypothesis	Structural Path	Standardised Parameter Estimate	t-value	Significance
H1	Learning orientation → (+) Learning Success	.289	2.544	p<.05
H2	IJV Partner Commitment → (+) Learning Success	NS		
H3	IJV Partner Mutual Dependency → (+) Learning Success	.258	2.298	p < .05
H4	Management Control → (+) Learning Success	.304	2.219	p < .05
H5	Conflict → (-) Learning Success	NS		
H6	Operational Experience (+) Learning Success	.191	3.415	p < .05
H7	Prior non-JV Experience → (+) Learning Success	.154	2.349	p < .05
H8	International Experience → (-) Learning Success	-.124	-1.744	p < .10
H9	Size → (+) Learning Success	NS		
H10	Learning Success → (+) Performance	.166	2.037	p < .05
Fit Indices: CFI=.905 CFI=.910 GFI=.775 Chi Square=1039.286 df=684 P value for the Chi-Square test=.0000 SRMR=.080 RMSEA=.056				

**Note:** t-values are from the unstandardised solutions, NS denotes not significant.