

EFFECT OF EXPORT MARKET KNOWLEDGE ACQUISITION THROUGH BUSINESS RELATIONSHIPS ON EXPORT PERFORMANCE OF UK SMEs

ABSTRACT

This study focuses on the role of business relationships as a means of acquiring export market knowledge and its impact on export performance. The study mainly draws from the Resource Based View (RBV), the Relational View (RV) and the classical internationalisation theories to develop a model that explores the link between an exporter's acquisition of market knowledge through business relationships and export performance.

Data was collected from 139 UK small and medium enterprises (SMEs) to test a structural model. Firstly, the model assessed if the experiential market knowledge collected through a key business contact had a positive impact on the export performance of the venture. Secondly, the model assessed if the market knowledge shared in the relationship was exclusive enough to explain the export venture's performance.

Findings revealed that both experiential knowledge and relationship exclusiveness of knowledge were significant contributors to export venture performance. Results also showed that an export manager's current level of foreign market knowledge influenced his ability to acquire experiential market knowledge. In addition, the quality of the relationship influenced the degree to which the knowledge acquired through a business relationship remained exclusive (relationship embeddedness of knowledge).

The study concludes with a discussion on the implications for export performance theory, implications for SME exporters and suggestions for future research.

Key words: business relationships, experiential knowledge, SMEs, export performance

INTRODUCTION

Lack of knowledge about foreign markets is one of the main barriers to exporting for SMEs (Crick, 2007; Leonidou, 1995; OECD Report, 2009). SMEs view foreign markets as being riskier than home markets because they lack not only relevant foreign market knowledge but also the ability to acquire it (Spence, 2003). Experiential foreign market knowledge, which is particularly important for internationalisation (Johanson & Vahlne, 1977; Johanson & Wierdersheim-Paul, 1975), is acquired through interaction with other internationalised firms (Hadley & Wilson, 2003; Johanson & Mattsson, 1988). This knowledge is particularly important because it is tacit (Kogut & Zander, 1993; Polanyi, 1962) which means that it is difficult to codify, copy and communicate. Meaning it is potentially a source of a sustainable competitive advantage (Fahy, 1999; Wernerfelt, 1984). Some studies have shown that foreign market research and more generally, the perception and use of information about foreign markets increases SME performance (Hart & Tzokas, 1999; McAuley, 1993; Toften, 2005). However there is little empirical evidence about the relationship between experiential market knowledge and SME export performance.

Competitiveness can also be derived and sustained by protecting the exchange of valuable market knowledge in relationships from opportunism. The Relational View (RV) stresses that the quality of a relationship is very important for the exchange of critical information¹ between the parties (Morgan & Hunt, 1999b). Market knowledge exchanged in good quality relationships characterised by high levels of trust is likely to be protected from opportunism

by competitors, thus enabling the knowledge exchanged to be contained within the relationship, and to be inaccessible to competitors. In this study we refer to this phenomenon as the '*relationship embeddedness of knowledge*'. We propose that relationship embedded knowledge due to its being inaccessible to competitors it is a potential source of a sustainable competitive advantage. Past export performance studies have mainly focussed on the relationship between internal and environmental independent factors' influence on export performance (Aaby & Slater, 1989; Zou & Stan, 1998) with most studies conceptualising a direct link (effect) between various independent variables on to export performance. While the role of relationships in explaining exporting competitiveness is now coming to the fore (Rosson & Ford, 1982) mainly through relationship marketing studies e.g. Kaleka (2002), Morgan and Hunt (1999), Styles and Ambler (2000), Ling-yee and Ogunmokun (2001), Lages et al., (2005), there is a need to further explore the effect of relationship quality in enhancing exclusivity of resources shared in relationships. Further, this study seeks to establish whether there is a relationship between relationship embeddedness of knowledge in an export manager's business relationships and an export venture's performance.

In export performance studies there has been a call for researchers to detect not only the main effect of independent variables, but also their moderating effects (Cavusgil & Zou, 1994; Sousa, Martínez-López, & Coelho, 2008). Ling-yee and Ogunmokun (2001) specifically pointed out the need for future studies to consider the moderating effect of relationship life cycle on relation behaviour and export advantage/performance (p. 417). In terms of the relationship between export market knowledge and export performance, some studies have found a direct link, others have not (Toften, 2005). Drawing on insights from relationship marketing this study aims to investigate the mediating role of relationship embedded knowledge between relationship quality and export performance. The study also investigates the mediating role of experiential market knowledge between a manager's export market knowledge and export performance.

The article is organised as follows; firstly we present an overview of the RBV and how it has been used to explain export performance, then we present our research model. In the model we propose that export performance in SMEs is positively influenced by competences derived from possession of experiential knowledge and access to foreign market knowledge embedded in business relationships. We also propose that a manager's current knowledge of exporting enhances his acquisition of experiential knowledge, while the relationship quality enhances relationship embeddedness of knowledge. We then describe the research methods used to test the hypotheses and present the empirical results. Finally we discuss the implications of our findings for exporting literature and SME exporters, then we provide suggestions for future research.

Achievement of high performance

The RBV conceptualises a firm as a unique bundle of tangible and intangible 'resources'. Only those resources and skills that have the qualities of being idiosyncratic, heterogeneous, inimitable and not easily transferable enable a firm to achieve a sustainable competitive advantage (Fahy, 1999; Penrose, 1955; Wernerfelt, 1984). The principal determinants of a firm's performance and strategy are the internal organisation's resources (Barney, 1991; Collis, 1991). However, purely focusing on internal organisational resources ignores the disadvantages or advantages that a firm may possess due to its being linked to an external network (Dyer and Singh, 1998). Dyer and Singh further argue that the search for competitive advantage should not only focus on those resources and capabilities housed within the firm,

but also on critical resources that may extend beyond the firm's boundaries through its business relationships. Consequently, they proposed the RV for explaining firm performance. While the role of the industry and organisational internal factors on performance is appreciated, SME's are dependent on business relationships for various value chain activities, including acquisition of the foreign market knowledge.

Inaccessibility to resources is not only through the inimitability of those resources or skills, it is also caused by how those resources are acquired. Being linked to particular relationships may make some resources accessible or inaccessible. In addition, the way the relationships are governed may also make resources accessible or inaccessible. Therefore in the following sections we suggest that a combination of the RBV and the RV to explain firm performance is an appropriate paradigm for explaining competitiveness and performance of SMEs.

Business relationships and exporting competitiveness

An exporting competitive advantage is defined as a firm's competitive strength relative to competitors in export markets (Ling-yee and Ogunmokun, 2001 pp. 406). Competitive advantages can be achieved through cost advantage, or a differential advantage (Kaleka, 2002; Piercy, Kaleka, & Katsikeas, 1998b). A cost advantage is attainable when the firm offers its product/service at a lower price, mainly due to lower production, procurement, distribution, and allied costs; while a differential advantage is attained when customers perceive a consistent difference in important attributes between the firm's offerings and those of competitors (Bharadwaj, Varadarajan, & Fahy, 1993; Day & Wensley, 1988).

Business relationships lead to achievement of cost advantage in a number of ways. For example, the development and maintenance of close relationships with important stakeholders can enable a firm to achieve cost reductions by focusing on developing products with those characteristics perceived valuable by overseas customers, (including lower prices) and to be more efficient in procurement activities (Low, 1997). After initial entry, the long-term nature of the relationship between exporters and overseas distributors may enhance cross-selling activities and produce scope advantages that contribute to low-cost advantages (Ling-yee and Ogunmokun 2001, pp. 402). In their study Ling-yee and Ogunmokun found that relational factors (relational cooperation between exporter and distributor and relation intensity between exporter and distributor) had a significant positive impact on crafting low-cost competitive advantage in export markets. In addition, business relations led to differentiation advantages because marketing relationships involve visiting key customers, stationing resident employees at customer premises for ordering, pricing, providing customer services and problem recovery with their findings confirming that relationship intensity had a powerful influence over attainment of differentiation based advantages.²

Relational competitiveness can also be achieved through the exclusivity/scarcity of the resources gathered through the relationships. Some of resources that are important drivers for developing inter-organisational relationships are exchange of products, services, money, information, know-how and personnel (Anderson and Narus, 1984), with foreign market knowledge as one of the valuable resources that a firm can acquire through its network of connected relationships. These relationships could be with, customers, customer's customers, competitors, suppliers, supplementary suppliers, distributors...etc.

However, an exchange of any resource of value is prone to opportunism by potential competitors (Coase, 1937; Williamson, 1975). Competitiveness derived from resources exchanged in a relationship will only be achieved if the relationships are governed in a way that enables the resources to be protected from opportunism and easy access (Morgan & Hunt, 1999a). Dyer and Singh (1998) identify two forms of relationship governance. Firstly, formal governance, where a relationship is guarded by third parties with use of, for example, written contracts. Secondly, self governance, where a relationship is guarded by self induced mechanisms, in the form of trust between the partners to the relationship. Formally governed relationships are more likely to be less effective in safe-guarding the resources being exchanged, because one cannot formally govern against all forms of opportunism. This lack of security reduces the exchange of much specialised knowledge between the partners for fear of opportunistic behaviour by the other party. Forming a formally governed relationship is easy and can be done very quickly; which makes such types of relationships vulnerable to being easily copied by competitors. The transactional costs of drawing and maintaining such relationships are likely to be costly, rendering resources exchanged through these forms of relationships to be a less likely source of competitive advantage.

On the other hand, relationships based on informal processes that encapsulate presence of goodwill between the social actors are likely to be successful, as proven in international strategic alliances for example (Inkpen & Birkenshaw, 1994; Kauser & Shaw, 2004; Parkhe, 1993; Robson, Skarmas, & Spyropoulou, 2006). The informal set up is conducive to exchange of specialised and valuable foreign market knowledge because the partners are assured that the knowledge exchanged is not going to be shared with competitors. Trust in informally governed relationships is built over time. The age of the relationship encourages information sharing, and has an impact on how specialised or tailor-made the knowledge exchange is (Lages, Lages, & Lages, 2005). Specificity increases as partners develop the experience of working together through which they accumulate specialised understanding of each other's needs, information, language and know-how. This allows them to communicate efficiently and effectively, reducing communication errors, thereby enhancing quality and increasing speed to market (Asanuma, 1989; Dyer, 1996). Hence, the knowledge exchanged becomes idiosyncratic to the firms in the relationship and such knowledge becomes inaccessible to competitors. This is referred to as '*relationship embeddedness of knowledge*' in this study. Only a valuable resource that is inaccessible to competitors has a potential of providing the firm with a sustainable competitive advantage, hence *relationship embedded knowledge* is a potential source of both cost and differential exporting competitiveness.

The reduction in transactional costs, as procedures that need to be formalised are reduced, will result in cost advantages. The effective communication and the specialised knowledge can bring insights into unique knowledge about the market which can allow the products /services to be customised for foreign markets resulting in differential advantage. This study proposes that through cost and differential advantages relationship embedded knowledge results in high export performance, hence;

Hypothesis 1: Relationship embedded market knowledge is positively linked to an export venture's performance

It should be noted that informational and experiential knowledge are developed at both individual and organisational level (Morgan et al., 2003). The knowledge level being considered in this study is at the individual manager's level and not the organisational level.

It is the export market knowledge accumulated by the manager (the respondent) through interaction/exchange with a key contact.

Relationship quality and relationship embedded knowledge

Relationship quality refers to the climate of a relationship, or the extent to which the interaction between the parties is marked by the development of goodwill, trust and expectations of reciprocity (Yli-Renko, Autio, & Sapienza, 2001). Relationship quality constitutes quality of communication, cooperation, trust and commitment (Kuhlmeier & Knight, 2010; Skarmeas & Robson, 2008). These dimensions or antecedents have been found to be the contributors to the environment that is created in a relationship.

Trust is the belief that a partner's word or promise is reliable and a party will fulfil his/her obligations in the relationship (Schurr and Ozane, 1985) or a partner's belief that the other partner will perform actions that will result in positive outcomes, as well as not take unexpected actions that would result in negative outcomes (Anderson and Narus, 1984). Dyer and Singh (1998) explain that relationships that are governed by trust (self governance relationships) are more likely to be effective in safe-guarding the resources being exchanged because the element of trust protects the partners from all forms of opportunism. This sense of security increases the exchange of knowledge between the partners. Since the information being exchanged ends-up remaining inside and being specialised towards the members of the relationship, the knowledge becomes relationship embedded.

Commitment is the belief by an exchange partner that an ongoing relationship with another is so important as to warrant maximum effort at maintaining it (Morgan & Hunt, 1994), also defined as an enduring desire to maintain a valued relationship (Moorman, Zaltman, & Deshpande, 1992). Commitment to the relationship by the manager, like trust and interaction has an impact on the overall environment that is created in the relationship. Commitment to a relationship is evident when parties show that they value the relationship i.e. they perceive the relationship as being important. If the relationship is being perceived as being important, the parties will be willing to incur costs or invest in a relationship for long-term benefits. The effect of one party being committed to the relationship may result in a reciprocal response by the other party. If one party feels the other party perceives them as being important, they are likely to feel favourably towards that party. In competitive environments, having a commitment towards building good relationships is particularly important in exporter/distributor relationships as it can ensure that the distributor/subsidiary performs adequate promotion, timely delivery, and proper maintenance and service (Tepstra, 1987). This study therefore proposes that just as it is the case with the existence of trust in a relationship, commitment may not only induce exchange of critical information, but also create an environment in the relationship where this critical information is kept within the bounds of the two firms' relationship to their benefit only. A hypothesis developed to test these arguments is;

Hypothesis 2: Relationship quality as measured by trust and commitment is positively related to relationship embeddedness of knowledge

Experiential market knowledge

Market knowledge can be derived from explicit market information or from experiential knowledge. Export channel partnerships are often motivated by the need to form relationships that deliver "experiential knowledge" about a market (Johanson & Vahlne, 1977) and to convert such tacit knowledge into explicit knowledge in ways that provide competitive

advantage (Nonaka & Takeuchi, 1995; Polanyi, 1966). Morgan et al., (2003) describe it as the knowledge gained from experience of overseas market operations. Styles and Ambler (2000) also refer to it as social learning, describing it as knowledge gained through personal interaction in the local market.

In international business, experiential market knowledge (rather than explicit knowledge) has been found to be the most useful for international growth. Experiential knowledge is acquired through direct exposure to foreign markets (Johanson & Vahlne, 1977), and through experiential learning as a result of accumulated experiences of specific relationships (Barkema & Vermeulen, 1998; Delios & Beamish, 1999). Hadley and Wilson (2003) found that a firm's interaction with other internationalised firms resulted in acquisition of experiential knowledge. Lindstrand (2003) identifies a specific form of experiential knowledge 'network experiential knowledge' which is defined as experiential knowledge a firm accumulates in its network of embedded business relationships. In these relationships, firms collect knowledge concerning counterparts, competitors, cooperation with other firms, product development, strategies, marketing, organising practices and international ventures (Lindstrand, 2003). These studies highlight the role that business relationships play in acquiring experiential market knowledge.

Further, management's international experience has been associated with a positive effect on export sales, export profits, export growth, and the composite measures of export performance. This is due to the fact that manager's international experience helps a firm to identify and leverage on the international opportunities while avoiding international threats (Zou & Stan, 1998). Understanding the characteristics of experiential knowledge enables us to understand why it is a possible source of competence in exporting and better export performance. The characteristics of experiential knowledge are described more clearly by the Knowledge Based View (KBV), (Davenport & Prusak, 1998) where experiential knowledge is also referred to as being 'procedural' and 'know-how', or knowledge from accumulated skills. The KBV indicates that experiential knowledge tends to be tacit and generally difficult to codify and communicate while informational knowledge is generally explicit and easier to codify and communicate (Polanyi, 1966; Reed & DeFillippi, 1990). For example, due to its nature of being specific to each country market and specific to each set of the actors involved in business experience, possession/lack of possession of this knowledge could determine which firms will be competent. Findings from past studies also support this idea, for example, in the RBV tacit knowledge has been argued to take a central place in the development of sustainable competitive advantage (Ambrosini & Bowman, 2001). This is because tacit knowledge is argued to be difficult to imitate, substitute, transfer and it is rare. When experiential knowledge is sourced in relationships, it also takes on other characteristics that make it difficult to imitate, that is, it becomes difficult to formalise, it becomes personal, i.e. it is entirely embedded in an individual and that it seems entirely natural, it is practical, i.e. it is more of a capability rather than a resource, more a skill than a resource and it is context specific – the knowledge is acquired on job, or in the situation.

As such, foreign market experiential knowledge becomes a source of a competitive advantage which could result in the provision of greater value to customers and thereby be expected to lead to superior export performance because experience can drive down cost through the introduction of economies of learning (Clark & Fujimoto, 1991). In addition, a firm's possession of experiential knowledge reduces the perceived cost of internationalisation (Eriksson, Johanson, Majkgard, & Deo Sharma, 1997). Lastly, substantial experiential

knowledge of foreign markets and operations may enable a firm to offer superior customer service before and after sales because it enables development of close working relationships which in turn can enhance understanding of customer requirements in those markets (Greenley, 1995). A more recent study that focuses on the role of relationships and knowledge acquisition is by Zahra, Ucbasaran and Newey (2009). They argue that as a firm internationalises using more high control entry modes, the more social knowledge it gains and this has a positive impact on product innovation. While their study focused on internationalisation in general, and not specifically exporting, the findings highlight a potential link between experiential knowledge and performance. If experiential knowledge can be acquired through interacting with business relationships that have foreign market knowledge exposure, firms who are more interactive with business relationships³ exposed to foreign market should have higher levels of experiential knowledge. It would also follow that if experiential knowledge has an element of being tacit (i.e. having a characteristic of being skill-based and not being explicitly identified or codified), then, apart from other factors, the difference in both export development and performance among SMEs could be explained by their difference in the levels of experiential knowledge acquired through interaction with business relationships that possess foreign market knowledge. These ideas lead to the following hypothesis;

Hypothesis 3: Experiential market knowledge acquired from business relationships is positively related to export performance

Determinants of experiential knowledge

Management attitude is one of the key factors that lead to successful export marketing (Aaby & Slater, 1989). While they refer to management attitude towards exporting in general, the extent to which an exporting manager can gain experiential knowledge is also going to be dependent on the manager's attitude to networking (or building business relationships). At a firm level, the extent to which the firm obtains resources from the environment through alliance creation is referred to as international networking orientation (Granovetter, 1973; Gulati, 1998). Ibeh (2003) confirmed that firms which actively developed networking relationships were more likely to have high export entrepreneurial orientation and hence better export performance. In terms of the influence of networking orientations influence on knowledge acquisition in particular Yli-Renko, Autio and Tontti (2002) observe that internal and external social capital influence acquisition and creation of knowledge guiding the international development of technological-intensive new ventures. The network approach to internationalisation (Johanson & Mattsson, 1988), even if it concerns organisational networks, stresses the role of network orientation in the development of knowledge during internationalisation. The study of the role of social networking on internationalisation knowledge acquisition by Basily (2007), confirms that social networking is significantly and positively associated with internationalization knowledge acquisition. Therefore if a manager's attitude is apathetic towards networking, the less the ability to benefit from resources exchanged through business relationships. Since one way of acquiring experiential knowledge is through interacting with experienced business contacts, the attitude that the manager holds towards networking will have an impact on the level of experiential knowledge acquired, making networking orientation an important dimension in the level of manager's internationalisation knowledge.

Further, prior experience enhances an individual's absorptive capacity. Absorptive capacity is the ability of the firm/individual to recognise value of new, external information, assimilate it and apply it to commercial ends (Cohen & Levinthal, 1990; Eriksson & Chetty, 2003). In line

with this notion, in the case of an exporting manager, their prior internationalisation experiences will determine their absorptive capacity, that is, their ability to determine the nature of market knowledge they acquire out of contacts and how they can put it to use. The term ‘internationalisation knowledge’ developed by Eriksson et al., (1997) refers to knowledge required to facilitate a firm’s international operations, for example, the knowledge that is required for it to adapt its resources and capabilities to the international environment. This type of knowledge refers to the know-how aspect of experiential knowledge or the procedural element of current knowledge that the manager has of the foreign market. Due to prior international exposure the manager has the qualifications to promote the internationalisation of not only its home production net, but it also has the quality of becoming a front runner in internationalisation (Johansson and Mattsson, 1988). It is this prior internationalisation knowledge which permits the firm to understand which foreign business knowledge and foreign institutional knowledge is required (Hadley & Wilson, 2003). Basing on these notions, it can be concluded that prior international trade experiences gathered through foreign business contacts can enhance acquisition of even more foreign experiential market knowledge. Thus, a manager’s prior internationalisation knowledge enhances the ability to assimilate more experiential knowledge, which could be in the form of business or institutional knowledge. Accordingly, this study proposes that;

Hypothesis 4: Manager’s knowledge as measured by a manager’s prior internationalisation knowledge and networking orientation is positively related to experiential knowledge

Mediating constructs

Early exporting studies postulated direct links from product, industry, and export market characteristics to export performance (Cooper & Kleinschmidt, 1985; Madsen, 1989), however, Cavusgil and Zou (1994) encouraged the introduction of export market strategy as a mediating variable. In their model they also confirmed the important role of international competence and commitment to an export venture as key constructs that influence market strategy and export venture performance. At the time, the construct international competence was operationalised broadly. However more recent studies based on the RBV in exporting have shown that while export resources may be proven to be positively linked to performance, such positive effects are not sustainable (Morgan, Vorhies, & Schlegelmilch, 2006) because for a resource to produce a sustainable advantage it has to be inimitable and non-substitutable. Therefore, the introduction of a mediating variable which is inimitable and unsubstitutable makes more sense in explaining exporting performance. In the study by Cavusgil and Zou (1994), international competence was operationalised as a mediating variable between internal/external forces of exporting and exporting performance, and they stated that international competence in international operations enables firms to select better export markets, formulate suitable marketing strategy and effectively implement the chosen strategy. However, in their model the concept of international competence is operationalised broadly. In current studies, international competence, or more specifically exporting competence can be operationalised more specifically because exporting competence can be traced to specific export resources e.g. reputational, financial, human, cultural, relational, informational (Kaleka, 2002; Morgan et al., 2006). In this study the focus is on the role of relational and informational resources in generating exporting competences. An inimitable resource derived from informational resource has been identified as experiential knowledge, while an inimitable resource derived from how a relationship is managed has been identified as relationship embedded knowledge.

The mediating role of experiential knowledge

In the past, the relationship between export information/knowledge and export performance has been empirically tested, for example by Toften and Olsen (2003), although such results are scarce (Toften, 2005). In his study in 2005, Toften tested this relationship once again with the results yielding an insignificant relationship between export knowledge and performance. In explaining this finding he argues that a study that includes an intervening mediator or mediation variable between export knowledge and export performance could result in a significant relationship. In particular, Toften (2005) mentions incorporating a 'competitive advantage' variable proposed earlier by Baker and Sinkula (1999) and Diamantopoulos and Horncastle (1997) as being a possible variable that could prove the missing link between information use and export performance. This study attempts to address this by proposing that experiential market knowledge is a possible mediator variable which could be a missing source of competitive advantage between an export manager's knowledge and export performance. Therefore, this study tests the following hypothesis;

Hypothesis 5: Experiential market knowledge mediates the relationship between an export manager's knowledge and export performance

Mediating role of relationship embedded knowledge

As highlighted above business relationships have the quality of inimitability. The literature has shown that both customer and channel relationships are valuable because they can create ties that reduce the ability of competitors to establish similar relationships with same customers and channel members (Morgan and Hunt, 1994). Competitors might well be able to imitate the visible tangible resources owned by the smaller firm, but it is more difficult to imitate specific relationships and idiosyncratic processes that give rise to superior international business competence and routines (Dev, Erramilli, & Agarwal, 2002). If such relationships become conduits of foreign market knowledge then the knowledge embedded in relationships also becomes an inimitable competence that is induced by the nature of relationship quality, and it could explain differential export performance. Relationship embedded knowledge is therefore a potential mediating variable between relational resources and export performance. Another study calling for the need to consider interaction effects both mediating and moderating the effects of firm factors and relational factors on export advantage is by Ling-yee and Ogunmokun (2001). With this context, this study endeavours to test if relationship embeddedness of knowledge mediates the relationship between relationship quality and export performance.

Hypothesis 6: Relationship embedded knowledge mediates the relationship between relationship quality and export performance.

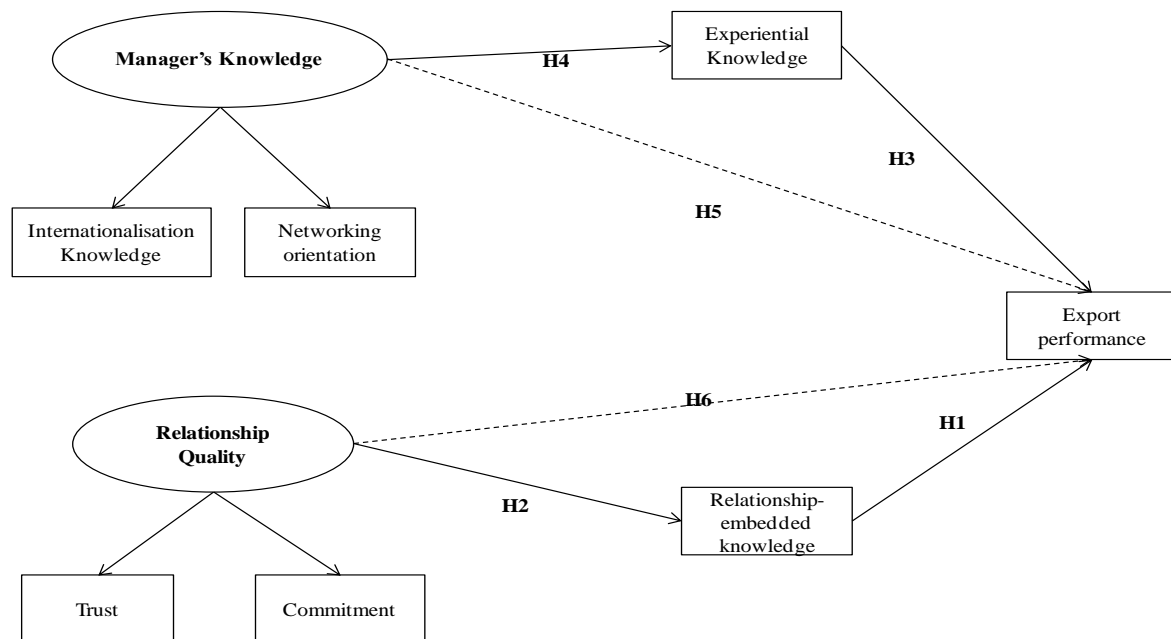
These hypotheses are summarised in the path diagram shown in Figure 1:

METHODOLOGY

Measurement of constructs

The survey instrument used for this study, a structured questionnaire, was developed through a comprehensive literature review on export performance, relationship marketing and internationalisation literature. A pilot questionnaire was sent to 14 high-technology firms and to a panel of 4 academics in the field. This was done to ensure content validity and to minimise ambiguity of wording.

Figure 1: Conceptual Model of Hypothesised Relationships



Multi-item scales were used to operationalise 7 main constructs, namely; Internationalisation Knowledge (IK), Networking Orientation (ON), Trust (T), Commitment (COM), Experiential Knowledge (EK), Relationship Embedded Knowledge (RE) and Export Performance (EP). Internationalisation knowledge and networking orientation are sub-constructs of a broader construct Manager's Knowledge (MK), while trust and commitment are sub-constructs of the broader construct Relationship Quality (RQ). Two constructs; networking orientation and relationship embedded knowledge were developed from ideas from literature and from the findings of the preliminary in-depth interviews by the authors, while the rest were borrowed from past studies.

Manager's Knowledge

This construct refers to the manager's inherent skills, effort and experiences that enhance his level of foreign market knowledge. The construct is being measured by two sub-constructs, networking orientation and internationalisation knowledge. Networking orientation refers to the export manager's inclination and effort to acquire resources from business relations. This construct was developed by the authors from insight gained from the study by Dimitratos and Plakoyiannaki (2003); Yli-renko, Autio and Tontti (2002). This construct consisted of 6 items, for the list of these items see Appendix 1. Internationalisation knowledge refers a manager's accumulated knowledge on how a firm can adapt its resources and capabilities in accordance to the international environment (Eriksson, et al, 1997). The items for this construct were borrowed from the work of Eriksson et al (1997) and Hadley and Wilson (2003).

Relationship Quality

This construct refers to the degree to which the climate of the relationship between the exporter and the contact is conducive to exchange of critical knowledge. In this study this construct is measured by two sub-constructs, trust and commitment. The items in both were derived from relationship marketing literature. The items for trust were compiled from a

review of scales borrowed from two studies Anderson and Narus (1984) and Styles and Ambler (2003). Items for commitment were generated from the study by Styles and Ambler (2003).

Knowledge Competence: (Experiential knowledge and Relationship embedded knowledge)
Knowledge competence was represented by two constructs, experiential knowledge and relationship embedded knowledge. Experiential knowledge refers to knowledge gained from interacting with contacts in foreign markets or experiencing overseas market operations. Experiential knowledge used items from scales developed in the study by Eriksson et al., (1997). Relationship embedded knowledge is the extent to which market knowledge exchanged between the exporter and their business contact is only accessible to the two parties to the relationship. This construct developed by the authors from ideas from the RBV and RV literature.

Export performance

Two forms of measures for export performance were used. For financial measures, the study used export sales and export profit from the venture. This was appropriate because it allows comparing and contrasting findings from different studies, thereby enabling advancement of literature in this field. Non-financial measures included manager's perception of how successful the venture was (Cavusgil and Zou, 1994; Styles and Ambler, 2003) on a 10-point scale (1= unsuccessful, and 10= successful). Respondents were also asked to indicate their perception of how well the venture performed in comparison to competitors in similar businesses (Piercy, Kaleka, & Katsikeas, 1998a) on a 7-point scale (1= Much worse, 7= Much better). The two financial scales were later aggregated into one item called (EPfin) and the two non-financial measures were also aggregated into one item known as (EPnonfin). Therefore, EP had two items generated from the 4 aggregated scales.

Data collection and measurement quality assessment

The empirical data used to test the hypotheses were collected in 2004 by means of a structured questionnaire, using a key-informant technique. While the data is old, the research focus on the role of relationships in explaining exporting performance is current. Some key studies which have focussed on this research agenda, e.g. Ling-yee and Ogunmokun (2001), Lages et al., (2005), Styles and Ambler, (2000), were conducted around the same period. Therefore findings from this study should still provide relevant contribution to this research agenda. However, the lapse of time's implication is that during the period between the years 2000 to now there have been significant developments in information and communication technology (ICT). Most of this technology is used to develop relationships e.g. use social networking sites, blogs...etc, such that future studies on this topic ought to incorporate the role of these technologies.

The sample frame consisted of UK based SMEs. A total of 808 firms were identified from medical device manufacturers' online databases (MDIS and Applegate), the Dun and Bradstreet credit rating online database, UK Trade Invest online database, and the FAME business database. The key criteria for inclusion in the sample was that they had to be UK based SMEs (firms with less than 250 employees), they had to be exporters, they had to be manufacturers of the products they were exporting and that they had to be independent firms, i.e. not subsidiaries of other firms. The interest in small high technology was due to the fact that SMEs in this sector were known to be likely to use networks to enter foreign markets (Coviello and Munro, 1995). Zaltman (1986) also stated that high technology firms are pro-innovation therefore they have the proclivity to be involved in extensive networking to acquire both

marketing and production related information. However, being high-tech based was not critical; priority was that the firms had to be SME exporters.

Final usable responses were received from 142 companies, yielding a response rate of 19%. The sample was composed of SME manufacturers of high technology products (75%) electrical and machinery products (11%), rubber and plastic products (7%) and textile products (6%). Two thirds of high-tech firms were medical devices manufacturers, (these included manufacturers of laser technology equipment, surgical instrument, x-ray equipment, optical equipment, prosthetic heart valves, blood processing equipment and imaging equipment). The remaining one third, were also high technology based firms, but these were developers of electrical and machinery equipment and various software products. Non-response bias was assessed on variables like company age, number of employees, industry, by comparing early and late respondents; the results indicated that non-response bias was not a problem.

For the purposes of validation and purification, all the scales were assessed for reliability using Cronbach's alphas, and Exploratory Factor Analysis (EFA). Reliability Cronbach's alpha scores of ranged from .66 to .90 as shown in Table 1. A reliability score of .66 for relationship embedded knowledge falls below the requirement for this test where the coefficient alpha should be at .7 or above for a scale to be deemed as being reliable (Pallant, 2007)⁴. This is not particularly surprising as this was new concept and this was the first time it was being measured. Further research is to be expected to be confident of the measurability of this concept.

Table 1: Co-efficient alphas

Construct	No. of Items	Co-efficient Alpha
Internationalisation Knowledge (IK)	4	.829
Networking Orientation (ON)	3	.754
Trust (T)	4	.698
Commitment (COM)	2	.761
Experiential Knowledge (EK)	12	.906
Relationship Embedded Knowledge (RE)	4	.660
Export Performance (EP)	4	.802

Results for EFA in Table 2 show the items which had strong individual loadings on each factor. All items with low loadings (<.5) and those that cross-loaded on other factors were removed from the study.

A measurement model using Confirmatory Factor Analysis (CFA) was run using the software AMOS on the remaining items for the constructs for IK, ON, T, COM, EK, RE and EP. CFA measurement model results were used to assess convergent validity. Convergent validity assesses the degree to which measures of the same concept are correlated. That is, items/indicators of the same construct should coverge or share a high proportion of variance in common (Hair, Anderson, Tatham, & Black, 1998). Convergent validity is proven by having high and statistically significant factor loadings. Standardised loadings should be .5 or higher, ideally .7 or higher (Hair, Black, Babin, Anderson, & Tatham, 2006). From the

Table 2: Exploratory Factor Analysis (Varimax rotation) of independent and dependent variables

<i>Manager's Knowledge</i>	Loadings
Factor 1: Internationalisation Knowledge	
IK1	.819
IK2	.884
IK3	.653
IK4	.819
Factor 2: Networking Orientation	
ON4	.851
ON5	.800
ON6	.741
<i>Relationship Quality</i>	
Factor 1: Trust	
T1	.784
T3	.919
Factor 2: Commitment	
COM1	.807
COM2	.607
<i>Knowledge Competence</i>	
Factor 1: Experiential Knowledge	
EK2	.640
EK3	.653
EK4	.753
EK5	.791
EK6	.864
EK7	.832
EK8	.697
EK9	.762
EK10	.737
EK11	.680
EK12	.600
Factor 2: Relationship embedded knowledge	
RE1	.528
RE2	.793
RE4	.585
Export Performance	
EP1	.606
EP2	.658
EP3	.837
EP4	.868

CFA results in Table 3 , all the item loadings were significant and above .5, proving convergent validity for all the constructs. Another recommended test for assessing convergent validity is the calculation of Variance Extracted (VE) and Construct Reliability (CR). A VE of .5 or above is required to prove adequate convergence, while for CR, a reliability estimate of .7 or higher suggests adequate convergence. A CR of between .6 and .7 may be acceptable

provided other indicators of a model's construct validity are good (Hair et al., 2006). Table 3 shows the results of both these tests on the measurement model. As shown, the composite reliabilities and average variances extracted ranged from .56 to .84, and from .39 to .64 respectively. All constructs, except, relationship embedded knowledge (VE = .41 or 41%) and export performance (VE = .39 or 39%) have a VE within the acceptable range (i.e. > .5). In terms of CR, all constructs, except export performance (CR = .56), have adequate reliability (i.e. above .6). These results therefore show that RE and EP have weak convergent validity. The low reliability of the dependent variable has implications on statistical power, replicability of the study and the interpretation of findings from the study (LeBel & Paunonen, 2011)⁵.

Discriminant validity, the extent to which a construct is truly distinct from other constructs (Hair et al., 2006) was also tested. Discriminant validity is achieved if the VE for each pair of constructs is greater than their respective squared-correlations (Fornell & Larcker, 1981). The results in Table 4 show the correlations and the squared correlations between the constructs. All VE estimates shown in Table 3 are greater than the corresponding squared correlation estimates in Table 4 (shown above the diagonal), suggesting that all constructs have adequate discriminant validity. In conclusion, the study's scales exhibited adequate validation. Even though the constructs RE and EP fared poorly on convergent validity, it was decided to keep them in the analysis because they fared well on all other validity tests.

RESULTS

The Structural model

In Structural Equation Modelling (SEM), a good fit requires a non-significant Chi-square (χ^2). The χ^2 alone is not enough, the Goodness of Fit Index (GFI), the Comparative Fit Index (CFI) and the Root Mean Square Error of Approximation (RMSEA) were also analysed in order to provide alternative perspectives on model fit. The criteria for an acceptable goodness fit is that a GFI should be .95 or above, a CFI should be greater than .90, and RMSEA should be below 0.10 (Hair, et al, 2006; Byrne, 2001). After estimating the research hypotheses using SEM the results for the overall fit of the model were $\chi^2 = 91.161$, which is not statistically significant ($p = .074$) for 73 degrees of freedom. The other diagnostics include, GFI of .91, a CFI of .97, an incremental fit index (IFI) of .96, and an RMSEA of .042. This shows a good fit because all the tests meet criteria's acceptable range. For graphical results see Appendix 4.

The influence of relationship factors on export performance

In support of **Hypothesis 1**, relationship embedded knowledge is positively related to export performance ($\beta = .280$, $p = .008$), even though the loading is low, showing that exclusive market knowledge accessed in the relationship was not the major contributor to export performance. On the other hand, consistent with **Hypothesis 2**, relationship quality is positively related to relationship embedded knowledge ($\beta = .480$, $p = .001$) suggesting that the climate of the relationship influences the extent to which the knowledge exchanged is exclusive to the relationship. The results also show that paths from both sub-constructs; trust ($\beta = .714$, $p = .000$) and commitment ($\beta = .706$, $p = .000$) are significant. This suggests that relationship quality is a multidimensional construct, confirming the dimensions as trust and commitment as evident in past studies (Kuhlmeier & Knight, 2010; Skarmeas & Robson, 2008).

Table 3: Confirmatory Factor Analysis Results

	Construct	Items	Standard error	Standardised factor loading	Critical ratio	P	CR	VE
Manager's Knowledge	Internationalisation Knowledge	IK1	.76	.79	10.965	***	0.84	58%
		IK2	.110	.93	10.965	***		
		IK3	.106	.53	6.225	***		
		IK4	.097	.73	8.944	***		
	Networking Orientation	ON4	.204	.81	6.018	***	.77	53%
		ON5	.163	.78	6.891	***		
		ON6	.135	.58	6.018	***		
Relationship Quality	Trust	T1	.251	.81	4.622	***	.74	64%
		T3	.186	.72	4.622	***		
	Commitment	COM1	.170	.66	4.213	***	.78	64%
		COM2	.332	.92	4.213	***		
Knowledge Competence	Experiential Knowledge	EK4	.093	.55	6.948	***	.87	58%
		EK5	.221	.84	6.808	***		
		EK6	.229	.91	6.928	***		
		EK7	.223	.88	6.948	***		
		EK9	.192	.56	5.305	***		
	Relationship Embedded knowledge	RE1	.238	.59	4.376	***	.67	41%
		RE2	.233	.75	4.886	***		
		RE4	.220	.57	4.376	***		
Export Performance	Venture Performance	EPnf	.489	.72	2.975	.003	.56	39%
		EPf	.231	.52	2.975	***		

Table 4: Inter-construct correlations and squared correlations of summated scores

Constructs	IK	ON	T	COM	EK	RE	EP
IK	1.000	.044	.055	.016	.001	.000	.067
ON	.210 [*]	1.000	.054	.047	.077	.001	.113
T	.235 ^{**}	.232 ^{**}	1.000	.162	.067	.041	.106
COM	.126	.216 [*]	.403 ^{**}	1.000	.032	.068	.070
EK	.080	.277 ^{**}	.258 ^{**}	.180 [*]	1.000	.000	.032
RE	.052	.088	.203 [*]	.261 ^{**}	.059	1.000	.114
EP	.258 ^{**}	.336 ^{**}	.325 ^{**}	.266 ^{**}	.179 [*]	.338 ^{**}	1.000

Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed). N=139. Entries above the diagonal, (in bold) are squared correlations

The influence of manager's knowledge on export performance

Hypothesis 3 proposing experiential knowledge is positively related to export performance was also supported ($\beta=.18$, $p=.05$). Once again the loading is low, suggesting experiential knowledge was not the main contributor to export performance. Manager's knowledge was positively related to experiential knowledge supporting **Hypothesis 4** ($\beta=.49$, $p=.016$), suggesting that the level of experiential knowledge was influenced by the manager's efforts and experiences. However, the results did not confirm that manager's knowledge was higher-order construct measured by internationalisation knowledge and networking orientation. This is because the path from networking orientation ($\beta=-.582$, $p=.005$) though significant, it is negatively related to manager's knowledge. The path from internationalisation knowledge ($\beta=.362$, $p=.005$) is positively related to manager's knowledge.

The mediation effects

A mediation effect is created when a third variable/construct intervenes between two other related constructs (Hair et al., 2006). In this study the conceptual model proposed that the relationship between manager's knowledge and export performance is not direct, it is rather mediated by experiential knowledge. The model also proposed that the quality of a relationship (i.e. the degree to which a relationship is characterised by the existence of trust and commitment between the parties) has an influence on export performance, however, this influence is not a direct influence, it is rather mediated by relationship embeddedness of knowledge. A prerequisite before assessing mediation is the existence of significant correlation relationships between (i) MK and EP (ii) MK and EK and (iii) EK and EP before testing **Hypothesis 5**. Likewise, in order to test mediation as stipulated by **Hypothesis 6**, there should be significant correlation relationships between (i) RQ and EP (ii) RQ and RE and (iii) RE and EP. As shown in Appendix 3 correlations were tested using t-values at both $p < 0.05$ and $p < 0.01$. All correlations were found to be significant at both $p < .05$ and $p < .01$. The correlation between MK and EP which was only significant at $p < .05$

Results on mediation test for Hypothesis 5 MK→EK→EP

The goodness of fit of the operational model was assessed (i.e. with EK as mediating MK and EK). Its goodness of fit indices are shown in Table 5. Afterwards, a direct path from MK to EP was added to the model, and then the goodness of fit indices was re-assessed. The goodness of fit improved very slightly when the direct path was added. However, the added path $\beta_{MK \rightarrow EP}$ had a loading of .25, and a critical ratio of 1.490 which is not significant at $p = < .05$. Since the direct path was not significant, this suggests that the mediation path (MK→EK→EP) is supported.

Table 5: Results on mediation test for Hypothesis 5

Hypothesis 5	χ^2	$\Delta\chi^2$	df	Δdf	p	GFI	CFI	RMSEA
Operational Model (with MK→EK→EP)	91.16		137		.074	.911	.974	.042
Model 2 (with path MK→EP added)	88.50	2.66	136	1	.091	.914	.976	.041

Since there was a slight improvement in the fit it was necessary to assess if this improvement was significant as indicated by the $\Delta\chi^2$. The chi-square difference statistics between the two models were not significant at both .05 and .01 levels, this shows the two models are producing similar fits, which suggests that experiential knowledge mediates the relationship between manager's knowledge and export performance.

*Results on mediation test on **Hypothesis 6** ($RQ \rightarrow RE \rightarrow EP$)*

The goodness of fit indices of the operational model (the model with RE as a mediating variable between RQ and EP) are shown in Table 6.

Table 6: Results on mediation test for Hypothesis 6

Hypothesis 6	χ^2	$\Delta\chi^2$	df	Δdf	p	GFI	CFI	RMSEA
Operational Model (with $RQ \rightarrow RE \rightarrow EP$)	91.16		137		.074	.911	.974	.042
Model 2 (with path $RQ \rightarrow EP$ added)	89.30	1.86	136	1	.081	.913	.975	.043

After the path between RQ and EP was added to the model, the direct path improved the fit very slightly, but the direct path between RQ and EP is not significant at $p < 0.05$ (c.r. of 1.331) suggesting the existence of mediation. To further test if the difference between the models was significant the chi-square difference statistics were calculated. The results showed that the models' fit were not significantly different at both .05 and .01 levels. These results suggest relationship embeddedness of knowledge mediated the relationship between relationship quality and export performance. For a summary on the results on all the hypotheses see Appendix 2.

DISCUSSION

Relationship embedded knowledge and export performance

The results suggest that there is a significant relationship between relationship embedded knowledge and export performance. Though the impact was not high, this finding seems to show that just as resources critical to a firm can be created through inter-firm linkages such as strategic alliances, joint ventures, they can also be in trust-based relationships (Dyer & Singh, 1998). Explaining the link between exclusive knowledge resource and firm performance, Bartlett and Ghoshal, (2002) state that scarce knowledge and expertise drive new-product development, and it is personal relationships (with for example, key customers) that drive flexible marketing responsiveness. In the same way, scarce knowledge embedded in relationships can be a source of insight for e.g. new-product development and flexible market responsiveness which are determinants of export performance (Kaleka, 2002), thus explaining the link between knowledge embeddedness and export performance. This finding is a contribution to the developing export performance literature which is beginning to embrace the role of relationships, specifically in SME export performance.

This study also explored relational factors that enhanced exclusive exchange of useful market knowledge in relationships. Key characteristics that have been identified to enhance such an environment are trust and commitment. The results suggest that there is a positive relationship between the quality of the relationship and relationship embeddedness of

knowledge in the relationship. Even though Dyer and Singh (1998) and Morgan and Hunt (1994)'s focus was on buyer and seller relationships, their views on relationships are in line with this study's finding. They reason that the climate of a relationship is very important in facilitating the exchange of critical information between the partners to a relationship. They present the notion that trust-based relationships induce the exchange of critical resources because such relationship create an environment where parties are prevented from exposing each other to opportunism from themselves and other players in their industry (paraphrased - Dyer and Singh, 1998).

The results have also confirmed the two dimensions of relationship quality, i.e. trust and commitment. The two are not exhaustive of all the dimensions that constitute this construct, but the findings confirm the multi-dimensional nature of this construct as shown in previous studies (Kuhlmeier & Knight, 2010; Skarmeas & Robson, 2008).

Experiential knowledge and export performance

The results gave evidence of a relationship between experiential knowledge and export performance. This link is in line with classical literature on the internationalisation process where experiential knowledge is highlighted as a key resource for firms to achieve international growth (Johanson & Vahlne, 1977). The contribution of this study as regards this finding is that it is among the few studies that have empirically suggested the existence of this link. However, while the results suggest the existence of this relationship, it was a weak relationship. The possible reasons for the weakness in the relationship between these constructs are thought to be firstly, the difference in the unit of analysis at which experiential knowledge is measured in this study and other past studies. Experiential knowledge in this study has been measured at an individual level i.e. a manager's experiential knowledge, such that attributing one employee's level of experience to an export venture's success may probably be simplistic. It is recommended that future studies researching on the relationship between experiential knowledge and export performance should consider experiential knowledge at other levels as well e.g. experiential knowledge at venture level or experiential knowledge at an organisational level. This is supported by Morgan, et al, (2003)'s finding that managers viewed both the experience of the individuals in the venture and the experience of the venture itself as being key knowledge resources in enabling the venture to develop and utilise its marketing capabilities that drive an export's venture performance. Secondly, considering that export performance is dependent on several factors, e.g., firm characteristics, strategy, external environment (Aaby & Slater, 1989; Zou & Stan, 1998), controlling for the effect of these other variables would provide more conclusive results. Lastly, assessing the link between experiential knowledge and a measure of export performance which directly influenced by knowledge use, e.g., new product development would also be more recommendable.

In terms of determinant factors of experiential knowledge, a manager's knowledge was confirmed to have a positive influence on experiential knowledge. Meaning that managerial effort, experience and characteristics/traits play an important role on knowledge acquisition. From the results it seems manager's prior possession of internationalisation knowledge induces the ability to acquire more experiential knowledge. This is in line with research findings in learning literature where it has been shown that prior knowledge (experience) enhances an individual's absorptive capacity (Cohen & Levinthal, 1990). That is, one's prior knowledge increases one's ability to acquire new knowledge (Bower & Hilgard, 1981). Studies addressing a similar notion but with a focus on internationalisation knowledge are

Hadley and Wilson, (2003) and Eriksson et al, (1997). The results did not confirm a manager's orientation towards networking as being a factor in acquisition of more experiential knowledge. This finding is contrary to both entrepreneurship and internationalisation literature. Entrepreneurship studies highlight that networking is one of the major strategies pursued by entrepreneurial firms in order to gain access to resources and cope with environmental uncertainty and impediments in their operations (Alvarez & Barney, 2001; Floyd & Wooldridge, 1999; Peng, 2001; Steensma, Marino, & Weaver, 2000). On the other hand, the network approach to internationalisation (Johanson & Mattsson, 1988) highlights that it is through relationships in the international network that a firm acquires international experience, leading to increase resource commitment in foreign markets (Eriksson et al., 1997; Johanson & Vahlne, 1977). These propositions suggest the more networking oriented the manager is, the more they are likely to gain access to experiential knowledge through business relationships. Since network orientation is one of the scales which was built from scratch, to ensure conclusive results it is worthwhile reassessing this hypothesis with a pre-tested scale on a different sample.

Mediation relationships

The results suggest that experiential knowledge creates a link between the export manager's knowledge acquisition efforts and export performance. The early work of Hart and Tzokas, (1999), highlighted the impact of formalised international market research tended to relate to better financial performance. Souchon and Diamantopoulos (1996) highlight the link between information use and export performance. However it is the work of authors like Toften, et al., (2003) and Toften (2005) that bring out the role of organisational knowledge, a concept from learning theory (Argyris & Schon, 1978; Sinkula, 1994) and knowledge management (Gupta, Iyer, & Aronson, 2000; Nonaka & Takeuchi, 1995). This concept which is interpreted as being a result of output of information-based knowledge and experience based knowledge (Toften, et al., 2003). In a later study Toften (2005) tests the link between export market knowledge and export performance. Their findings yielded inconclusive results leading the author to call for studies which include a mediator or moderator variable. In particular they state that incorporating a 'competitive advantage' variable would provide more conclusive results. Kaleka (2002) also called for more studies focusing on competitive advantages in exporting literature. Hence, this study's inclusion of 'experiential knowledge' as a mediating variable between knowledge acquisition and performance contributes to filling this conceptual gap.

Relationship embedded knowledge was also found to link the influence of relationship quality to export performance. What is evident from these findings is that export venture performance is to an important degree determined by the manager and the firm's own effort. While small firms may lack resources, key factors which are in their control can influence the degree to which they are competent. As shown, competence from experiential knowledge is influenced by a manager's prior acquisition of internationalisation knowledge while competence derived from relationship embedded knowledge is a result of relationship quality, i.e. the presence of trust and commitment to the relationship (which may include actions like, sales force training, technical assistance, marketing know-how, promotional support, and the building of trust).

CONCLUSION

SME exporters' lack of export market knowledge due to lack of exporting experience could be compensated for by building relationships with contacts who are already internationalised

e.g. exporting agents, potential foreign market customers and foreign suppliers. Commitment and trust may have to be built over a period of time but they are a worthwhile investment to achieve better export performance.

The link between relationship embeddedness of knowledge and export performance is crucial, as it directly contributes to the work of studies which have highlighted the role of network related advantages (Johanson & Mattsson, 1988), relational advantages (Dyer & Singh, 1998; Morgan & Hunt, 1999b) on their impact on export performance (Styles & Ambler, 1994). Conceptual models explaining export development of SMEs need to accommodate the significant role that network relationships have on the export development of small exporters. Past studies explaining exporting performance (Aaby & Slater, 1989; Wheeler, Ibeh, & Dimitratos, 2008; Zou & Stan, 1998) have included networks in their models; but this aspect is mostly mentioned in passing. Business relationships are not only a source of knowledge; skills in management of relationships have an impact on export performance. Relationships ought to form a prominent part of models explaining SME export performance. Indeed there is need for further research on how best to leverage skills in managing and acquiring knowledge resource from relationships in order to increase a firm's export performance.

In exporting literature, management-related attributes that have been identified as having an impact on export performance, include management export commitment, international orientation, entrepreneurial orientation (Wheeler et al., 2008). In addition to these, based on the findings in our study, UK exporting SMEs, aiming to achieve improved export performance could benefit from recruiting and equipping staff with skills in acquiring and managing business relationships with customers, distributors and suppliers. Whilst finding key and useful contacts can at times be an impromptu activity (some managers in the preliminary interviews said they met their most useful contacts over a drink in a pub) it is essential that networking should not be a passive activity in the firm. Rather it should be a deliberate and planned activity, where less useful contacts can be dropped and useful contacts can be properly invested in and clearly budgeted for. Developing relationships should be a strategically planned activity.

Obviously relationships that have been in existence over a long time are likely to have a better relationship quality. However, new export managers have some control over creating such environment. They could improve the quality of their relationships through creating an environment of trust and commitment to the relationship. Commitment involves investment in time in interacting with the contact and investment of finance in improving the after sale service quality to the contact.

The results of this study ought to be interpreted with caution. Firstly, the use of un-prettested scales for the constructs; networking orientation (ON) and relationship embedded knowledge (RE) presented a challenge. In view of this we suggest that future studies do not shun these scales but attempt to improve them, for example, by having a wide range of items to improve the internal consistency of the scales. Secondly, data presented is from the perspective of the export manager only instead of incorporating views of both parties to the relationship⁵. This compromises the validity of statements provided by the manager, especially on issues like the level of trust and commitment in the relationship. In future studies, analysing data on the perspectives of both the export manager and his contacts should enhance the findings of a similar study.

Lastly, the advent of Web 2.0 technology development and evolution of web-based communities has brought in social-networking sites, video-sharing sites, wikis, blogs, mashups and more. There have also been developments in websites which are specifically aimed at enhancing international business relationships. For example, websites like GlobalScot (www.globalscot.com). These developments necessitate that future studies on competitiveness derived from business relationships ought to consider management use of this technology in acquiring and managing business relationships.

Notes

1. In this study we conceptualise information and knowledge as being different but related concepts, in that knowledge is an output of information. Knowledge is being conceptualised as being derived from both explicit meaningful information and experiences. A manager's export market knowledge as conceptualised here refers to knowledge which a manager derives from both information and experience in export related activities. Export market knowledge in this sense includes both the tacit and explicit forms of knowledge used by exporting SMEs. Tacit knowledge referring to knowledge based on the experience of individuals, thus, practical know-how (Polanyi, 1962), on how to conduct an exporting activity in a foreign market. Explicit knowledge is based on export information, which can be expressed, or specified verbally. The term used to refer to tacit exporting knowledge in the study is experiential knowledge, while the term used to refer to explicit exporting knowledge is export information. Collectively, the two forms of knowledge are referred to as export market knowledge. We are therefore proposing that in a case where an exporter is using relationships to acquire export market knowledge, exporting competitiveness can be derived from the nature of knowledge i.e. its being experiential therefore inaccessible, and from market knowledge being inaccessible due its being embedded in a relationship. The knowledge embedded in a relationship can be either explicit or implicit, or have elements of both.
2. Intense level of resource dealings between exporters and their overseas distributors implies that extensive mutual adaptation and commitment crafting effective product/service differentiation in export markets (Ling-yee, and Ogunmokin, 2001 pp. 411)
3. The export manager was asked to provide information about one key relationship they have with a particular business contact, (who can either be an export agent, distributor, supplier, customer, competitor, family member/personal friend), from whom they have sought and acquired knowledge which they have used to enter or operate in a particular export market/s. A business relationship refers to a relationship between with an export manager and either of these.
4. Relationship embedded knowledge (RE) is a construct developed from relational studies which are qualitative studies. The inclusion of this construct was an attempt to use a more sophisticated quantitative approach to knowledge: using some of the useful conceptions of knowledge that have come from more qualitative work. Certainly some of the attempts at measurement of these concepts have not been as successful as might have been hoped, hence the low reliabilities for this sample.
5. To the author's knowledge, there is no exporting study which has reported an unreliable dependent variable on export performance. However a study by LeBel & Paunonen (2011) though from Psychology specifically dealt with the effects of implicit dependent variables (commonly used psychology studies) which also tend to have low reliability scores with most studies having an average score of .30. In their study they highlight that unreliable dependency variables result in
 1. the reduction in statistical power, i.e. the increase in the likelihood of the study not detecting an effect when there is no effect
 2. the reduction in ability to replicate an effect in another study
 3. the need for carefully taking into account the reliability of the variable when evaluating research findings involving unreliable dependent variable

Appendix 1: The scales used to measure the constructs and their sources

Construct	Item	Source
Internationalisation Knowledge	<ul style="list-style-type: none"> • Perceived lack of senior management international experience • Perceived lack of international marketing planning and implementation experience • The difficulty in determining foreign business opportunities • The inability to easily modify marketing mix elements for foreign markets 	Eriksson et al, 1997; Hadley and Wilson, 2003
Networking Orientation	<ul style="list-style-type: none"> • Finding contacts that provide export market knowledge is a matter of chance • There is no substitute for export market knowledge acquired through contacts • Contacts which can provide export knowledge are easily found • Maintaining relationships with contacts has contributed to our success in exporting • It is essential to have overseas contacts in order to understand foreign markets • <i>In this firm, efforts of staff to develop overseas contacts are actively supported</i> 	<p>Author</p> <p>"</p> <p>"</p> <p>"</p> <p>"</p> <p>"</p>
Trust	<ul style="list-style-type: none"> • Confidence that the contact acts in the company's interest • At times this contact cannot be trusted • This contact can be counted on to do what is right 	<p>Adapted from Anderson and Narus , 1984</p> <p>Adapted from Styles and Amber, 2003</p>
Commitment	<ul style="list-style-type: none"> • Intention to maintain relationship indefinitely • Deserves maximum effort to maintain • <i>Level of expenditure invested in the relationship</i> • <i>Amount of time invested in the relationship</i> 	<p>Styles and Amber, 2003</p> <p>Styles and Amber, 2003</p> <p><i>Author</i></p> <p><i>Author</i></p>

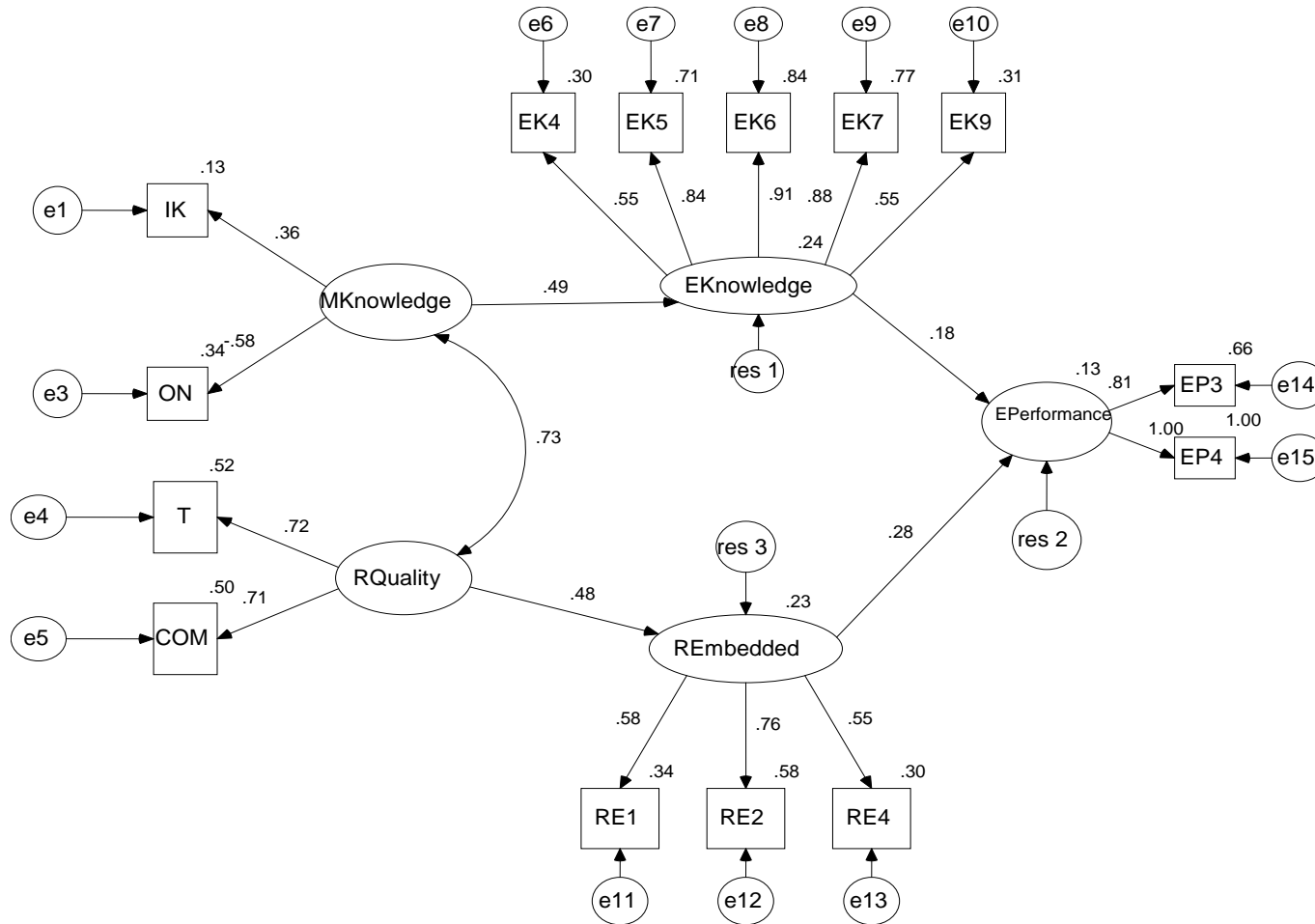
Appendix 2: Results for hypothesised relationships

Hypothesis and prediction	Construct and predicted influence	Standard loading	Estimate	S.E	C.R.	P	Conclusion
H1 (+)	Relationship embedded knowledge → Export performance	.280	.323	.122	2.636	.008	Supported
H2 (+)	Relationship quality → Relationship embedded knowledge	.480	.452	.139	3.248	.001	Supported
H3(+)	Experiential knowledge → Export performance	.176	.203	.104	1.957	.050	Supported
H4 (+)	Manager's knowledge → Experiential knowledge	.492	.885	.369	2.402	.016	Supported
H5	Experiential knowledge mediates the relationship between manager's knowledge and export performance						Supported
H6	Relationship embedded knowledge mediates the relationship between a manager's knowledge and export performance						Supported

Appendix 3: Correlation results

X and Y	Correlation Co-efficient	Critical r value p < 05, df = 137	Critical r value p < 01, df = 137
MK and EP	.185*	0.16384	0.2188
MK and EK	.492**	0.16384	0.2188
EK and EP	.224**	0.16384	0.2188
RQ and EP	.198**	0.16384	0.2188
RQ and RE	.480**	0.16384	0.2188
RE and EP	.312**	0.16384	0.2188

Appendix 4: SEM results of the operating model



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