Paradigms
Print ISSN 1996-2800, Online ISSN 2410-0854
2020, Vol. 14, No. 1 Page 194-213
DOI: 10.24312/193014029

Four-Factor Explanation on Working of SMEs without Product Brands: A study of Surgical Industry of Pakistan Using Higher Order Model in Smart PLS

Muhammad Rizwan Saleem Sandhu[1], Tashfeen M Azhar[2]
Department of Management Sciences, Virtual University of Pakistan, School of Business & Economics, University of Management & Technology, Lahore
Corresponding Author: rizwansaleem@vu.edu.pk

Cite this paper: Sandhu, M. R. S, & Azhar, T. M. (2020). Four-Factor Explanation on Working of SMEs without Product Brands: A study of Surgical Industry of Pakistan Using Higher Order Model in Smart PLS. *Paradigms, 14*(1), 194-213.

It is argued in the literature that international SMEs of developing country origin are an integral part of international trade/global value chain, and contributing a lot to both their national economies (Lukács, 2005) and international market (Gereffi, 1999; Schmitz, 2005; Savlovschi & Robu, 2011). This is also argued that most such SMEs have only graduated to the stage of OEM (Original Equipment Manufacturer) and their up-gradation to the level of ODM (Original Design Manufacturer) and OBM (Original Brand Manufacturer) is constrained/ hindered. Though there are factors discussed in the literature that attempt to explore the reasons for such constraint/hindrance yet the phenomenon is not sufficiently explained that what hinders international SMEs to offer their product brands in the international market(s). The study aims to explore and explain the factors/reasons that hinder international SMEs from introducing their product brands in the international market(s). In light of the literature, it has been argued that no theory could sufficiently explain the phenomenon of SMEs operating in international markets without their brands. The current study, building on this theoretical gap, is of importance as on one side it will contribute to the theory by identifying the factors and explaining that why developing countries' SMEs do not introduce product brands in the international market. It will cover all the possible factors that could sufficiently explain the phenomenon. On the other side, it will also be of immense practical value for the industry players and policymakers in promoting product branding among SMEs. Further to this, the study is also of significance because it will allow some recommendations for SME branding in international markets as required in the sectoral reports published by the Sialkot Chamber of Commerce & Industry (Industry, 2016c). Keeping in view the aim of the study mix method approach has been employed in which first factors were explored using a review of the literature and interviewing firms of the surgical instruments industry of Sialkot, Pakistan. This paper specifically shares the findings of the last part of the study which has resulted in Four-Factor Explanation.

Keywords: Organizational Factors, Entrepreneurial Factors, Marketing Factors, Environmental Factors, Surgical Industry, Mixed Methods.

INTRODUCTION

It is argued in the literature that international SMEs of developing country origin are an integral part of international trade/global value chain, and contributing a lot to both their national economies (Lukács, 2005) and international market (Gereffi, 1999; Schmitz, 2005; Savlovschi & Robu, 2011). This is also argued that most such SMEs have only graduated to the stage of OEM (Original Equipment Manufacturer) and their up-gradation to the level of ODM (Original Design Manufacturer) and OBM (Original Brand Manufacturer) is constrained/ hindered. Though there are factors discussed in the literature that attempt to explore the reasons for such constraint/hindrance, yet the phenomenon is not sufficiently explained that what hinders international SMEs to offer their product brands in the international market(s).

The study aims to explore and explain the factors/reasons that hinder international SMEs from introducing their product brands in the international market(s). Considering the literature, it has been argued that no theory could sufficiently explain the phenomenon of SMEs operating in international markets without their brands. The current study, building on this theoretical gap, is of importance as on one side it will contribute to the theory by identifying the factors and explaining that why developing countries' SMEs do not introduce product brands in the international market. It will cover all the possible factors that could sufficiently explain the phenomenon. On the other side, it will also be of immense practical value for the industry players and policymakers in promoting product branding among SMEs. Further to this, the study is also of significance because it will allow some recommendations for SME branding in international markets as required in the sectoral reports published by the Sialkot Chamber of Commerce & Industry (Industry, 2016c).

Keeping in view the aim of the study mix method approach has been employed in which first factors were explored using a review of the literature and interviewing firms of the surgical instruments industry of Sialkot, Pakistan. This paper specifically shares the findings of the last part of the study which has resulted in Four-Factor Explanation.

Background of the Industry

According to a newspaper source, citing figures of Pakistan Bureau of Statistics, the Surgical Industry of Pakistan has exported surgical and medical goods worth the US $ 339.19 Million during 2016-17 to USA, Europe, Asia, and Africa. The Surgical Industry of Pakistan, The Industry from now onwards, is situated in the City of Sialkot, Punjab, Pakistan, among other leading export-oriented industries such as Sports Goods, Sports

Wear, Leather Wear, Musical Instruments, etc. The City of Sialkot is historically known as the house of the export-oriented industry of Pakistan contributing significantly to the overall export earnings of the country. The City is situated in north-east of the Punjab province, 130 KM from Lahore, the capital city of Punjab, bordering Jammu & Kashmir. The city is reported to be among the oldest cities of the world having a bright future owing to its potential of international business. The City is also the part of the Golden Triangle, consisting of Sialkot, Wazirabad, and Gujranwala, known for its export potential.

The Surgical Industry emerged 100 years ago on the tradition of metalworking when the local Mission Hospital got repaired its surgical instruments from the local ironsmiths early in the 19th century. The repair work was performed well according to the expectations of the hospital that the ironsmiths gradually received orders for the manufacturing of instruments from the local hospital. The Dean of the hospital used to provide imported instruments to the local ironsmiths for manufacturing their copies. With the patronage of the local hospital, ironsmiths developed the skill of manufacturing surgical instruments manually, diversifying from the manufacturing of other metalworking such as the manufacturing of swords, daggers, utensils, etc. This emergence got sustainability because the local hospital industry got the alternative supply source of surgical and medical instruments while the ironsmiths found the market for new products.

Two periods are considered critical in the life of the industry; 1940s during The World War II and 1970's, in the former the industry was used by the British Government as an alternative supply source of surgical instruments during The World War II when the supply route was cut by the German forces, and in the latter, the industry developed its connection with Germany, the most progressive and leading manufacturer and exporter of surgical instruments. Connection with Germany based Tuttlingen Surgical Instruments Manufacturing Cluster gave real impetus to the industry in terms of exposure of working under quality standards and working with sophisticated markets such as the USA and Europe. The potential and craftsmanship of entrepreneurs and workers in the industry took the industry to the next level becoming trustworthy partners, as job processors and Original Equipment Manufacturers, of international brands within the shortest possible time. Since its emergence the industry has witnessed many changes and challenges, changes in terms of technology such as from manual forging to hammer forging, from manual die making to machine-based die making, and many others to name a few. While in terms of challenges the industry has faced international restrictions owing to the heterogeneous quality and child labor. On the front of changes and challenges, the industry has always responded positively to assure its survival and progress. The industry is organized as it is the part of the global value chain of surgical and medical instruments, on the downstream end it is connected with global brands operating in the USA, Europe, Asia, and Africa, and on the upstream end, it is connected with surgical forging firms of Daska and Rolling and Furnace Mills of Gujranwala, working in the surgical industry in the capacity of manufacturing exporters, non-manufacturing exporters, non-export manufacturers, commercial makers, and job processors. The industry is supported by the surgical forging industry and vending segment, in Daska and stainless-steel furnaces and rolling mills working in Gujranwala. Figure 1 in Annexure elaborates the value chain of the industry.

The process of manufacturing a typical instrument is divided into different jobs processes and a typical firm in the industry performs a percentage of processes in-house while outsources different jobs to firms outside such as commercial makers, job processors, and forging firms.

Mainly the industry is involved in the manufacturing of thousands of instruments. According to an estimate, more than 2000 types of instruments are manufactured by the industry from traditional hand-held to sophisticate endoscopic to microsurgery instruments (SIMAP, 2018). The instruments manufactured and exported by the industry chiefly falls into the category of disposable and reusable instruments as far as the life of an instrument is concerned. A disposable instrument, as the name suggests, is used only once while the reusable instrument is used from 10 to 15 times after sterilizing (Nadvi, 1999). Disposable instruments are manufactured by using the locally manufactured stainless steel, manufactured by using a scrap of imported steel by the furnaces and rolling mills, while reusable instruments are manufactured by using the stainless steel imported from European countries. Generally, disposable instruments are exported to the USA and reusable to European countries.

The industry has been facing several issues as reported by Sandhu and Zaheer (2014) while discussing the surgical forging industry of Daska, an important component of the surgical industry of Sialkot. They have argued that the industry faces several issues in all functional areas such as training of human resources, physical infrastructure, financial management, marketing and branding, modern management practices, and adoption of modern technology to name a few.

Overall the industry has an active association known as The Surgical Instruments Manufacturers Association of Pakistan which was established in 1958 with the prime objective of taking care of the interests of members of the industry (Sandhu & Zaheer, 2014; Sandhu, Zaheer, Sadiq, & Feroze, 2011; SIMAP, 2018).

LITERATURE REVIEW

Wickramansinghe and Sharma (2005) while discussing opportunities and hurdles for SMEs in the knowledge economy have elaborated that generally SMEs lack in the areas of organization, technology, and marketing. The key for SMEs in availing opportunities for low-cost easy access to international markets is to invest in human resources and infrastructure to be innovative and able to deliver fast. The role of SMEs in a knowledge-based economy is of high significance (Khalique, Isa, Shaari, Abdul, and Ageel, 2011). The most critical success factor in the knowledge-based economy is intellectual capital in which SMEs are mostly deficient (Khalique, Isa, Shaari and Abdul, 2011).

Smallbone, Leig and North (1995) have compared high and low performing SMEs based on their strategies and characteristics, such as size, age, and sector, and found that in the high-performance strategies of firms have contributed much more than their characteristics. High performing firms were also found to deal with market and product developments differently from low performing firms. Such firms also invested in production technology and organizational structure. Entrepreneurs in high performing firms were more focused on strategic matters and they had delegated operational matters to other employees.

Deakins and Freel (1998) have argued that learning at both entrepreneurial and organizational level contributed to the growth process of SMEs as it did for Large Scale Enterprises (LSEs). Chittithaworn, Islam, Keawchana and Yusuf (2011) and Philip (2011) have outlined eight different factors that affect the success in SMEs in the context of Thailand and Bangladesh. These factors are environment, firm strategy, finance, method of doing business, market dynamics, products, technical know-how, and managerial ability. Bhutta, Rana and Asad (2008) have reported that there is a relationship between the health of SMEs and ownership characteristics such as generation in the business, educational qualification, number of partners, interests, and habits of owners.

SMEs do contribute to GDP and per capita income of a country but their role in growth and alleviation of poverty and inequality is not empirically supported (Beck, Demirguc-Kunt and Levine, 2005). Abor and Quartey (2010) on one hand have acknowledged the significant contribution of SMEs to GDP and the provision of manufacturing employment in developing countries and on the other hand, highlighted the factors that have hindered SMEs from further progress and contribution. These factors are insufficient finance, lack of access to modern technology, lack of managerial skills and advanced training, poor institutional capacity and lack of access to foreign markets. Aragón-Sánchez and Sánchez-Marín (2005) by using the framework of Miles and Snow have confirmed that the orientation of a firm in SMEs does affect the firm performance and efficiency of the business. Key areas in this regard on which emphasis is laid are the management of human resources, design of the organization, innovation, and technology of the firm. Gelinas and Bigras (2004) believed that SMEs are under continuous pressure from their environment to adopt modern technologies and methods. In their opinion characteristics and features of SMEs are key deciders in this regard. PerezBarto-Sanchez and Bower (2003) argued that SMEs have constraints from both inside and outside; from within issue relate to the limited awareness and expertise and from outside issues relate to compliance to the market requirements and regulatory frameworks.

The decision in SMEs to go international and the path of internationalization depends on the entrepreneur's inclination for international business (Hutchinson, Quinn and Alexander, 2006). Ghobadian and Gallear (1996) have beautified the role and importance of SMEs by arguing that it is not only in the interest of economies but also in the true interest of Large Scale Enterprises that SMEs keep on producing high-quality products and services. SMEs are not only the lifeblood for economies but also a link between suppliers, LSEs, and markets. Summing up their arguments they have emphasized the total quality management system for SMEs.

Even though open innovation is as effective in SMEs as in LSEs the extant literature largely excludes SMEs from the debate and SMEs have mostly benefited from open innovations in the presence of intermediaries (Lee, Park, Yoon and Park, 2010). Generally, medium enterprises are more into open innovation than small counterparts, and mostly SMEs pursue open innovation to meet customer demands and cope with competitors (Van de Vrande, De Jong, Vanhaverbeke and De Rochemont, 2009). Rahman (2013) has argued that despite the increasing culture of open innovations SMEs is the sector that still lags in seeking benefit out of open innovation. According to Messeghem (2003) although owing to the difference in organizational structure SMEs differ in their entrepreneurial orientation yet entrepreneurial orientation is a fact in the case of SMEs. Gilmore, Gallagher and Henry (2007) have studied the use of the internet among SMEs for marketing and found that there is evidence of SMEs using it but this use is very basic.

Kamal and Flanagan (2014) in their study of rural construction sector SMEs in Malaysia have stated that the road to progress for SMEs comes when they manage to use a variety of approaches of doing business, absorb political pressures, implement new technologies and fight for the survival. Government support, knowledge of the owner about information technology, sense of benefits generated by an electronic business, and global strategy are the factors which contribute to the electronic business by SMEs, while competitive pressures, cost of adopting such techniques, and size of business remain insignificant in this regard (Jeon, Han and Lee,2006). Bos-Brouwers (2010) argues that innovation in SMEs is generally incremental and aims at cost reduction and technological process improvements; however radical innovations are also evident in a few SMEs in the shape of new products.

In the unstable environment sustainability of an organization depends on its resilience, and sustainability and resilience come from the ability to innovative which is the function of managing change successfully. SMEs contribute a significant portion to the world production while being in troubled environments, therefore their sustainability depends on their resilience. To make SMEs more resilient there is a need to enable them to deal with the process of change (Ates and Bititci, 2011). Pansiri and Temtime (2008) presented that capacity building in SMEs depends on the development of managerial skills. Lloyd-Reason and Mughan (2002) write that the behavior of SMEs largely follows the behavior of the entrepreneur and his behavior is influenced by the culture of the region he belongs to. The decision of SMEs to internationalize is also the function of an entrepreneur being convinced of the benefits of internationalization.

Van Scheers (2011) argued that marketing skills in SMEs are directly related to their success, and the absence of such skills has caused the failure in many SMEs. ICT revolution has changed the rules of the game all over the world and its implications are no different for SMEs, the typical problem of SMEs is they are lacking ICT skills (Duan, Mullins, Hamblin, Stanek, Sroka, Machado and Araujo, 2002). The solution to the lacking is to offer ICT based training that SMEs can benefit without missing day to day work activities.

Paul, Parthasarathy and Gupta (2017) stated that those SMEs which intend to export have to face both micro and macro-level challenges such as resource constraints, poor marketing skills, lack of distribution network, political instability, lack of government support, and unfavorable regulatory framework. Fast changes in technology, a sharp competitive environment, and globalization have pulled and pushed the SMEs enough to come out of the domestic markets to enter into international markets (Ocloo, Akaba and Worwui-Brown, 2014). Entry into the global market place is not an easy job for SMEs as they are hindered by the increasing competition, insufficient government support, inadequate marketing skills, and defective infrastructure. Saungweme, Naicker, and Chuma (2010) have observed that SMEs face challenges at both tactical and strategic levels, and there is no uniform approach that SMEs may follow in relationship marketing.

Cant and Wiid (2013) have identified that the failure rate among SMEs in South Africa is high and this is chiefly because of high crime rate, unemployment, low demand, inflation, and wrong pricing strategies. Agwu and Emeti (2014) recommended that the government's generous financial support, social infrastructure, and concessional taxation system can help SMEs overcome the different challenges they face. Lampadarios (2016) building on his survey of SMEs in the UK he has argued that access to finance, compliance of regulatory framework, human resources, and management of suppliers are critical factors for SMEs, and these need to be addressed simultaneously. Wonglimpiyarat (2015) has commented that the most important service a government should offer to SMEs was the provision of easy finance so that SMEs could fuel their innovations.

Singh, Garg, and Deshmukh (2009) have compared the working of SMEs and government promotion schemes for them in India and China. Resultantly they have noted that as far as focus is concerned SMEs of both countries are different despite many similarities in characteristics. For example, Indian SMEs pay more attention to productivity, suppliers, and culture of the organization while Chinese SMEs consider relationship management and cost reduction more important. This difference in orientation has also resulted in different growth rates in both countries. Jones and Jain (2002) have stated that if SMEs want to survive for long they need to overcome the disadvantages stemming from their size, and resource constraint. Suggestions in this regard are the formation of alliances and the introduction of innovative products. They have also argued that technology transfer for SMEs is a critical situation.

Winch and Bianchi (2006) noted that globalization affects SMEs and in the global market place competition has been not only at the downstream but also at the upstream. Singh, Garg and Deshmukh (2008) pinpointed that globalization has offered many opportunities for SMEs especially integration with LSEs. The best way to benefit from these opportunities for SMEs is to benchmark the best in the industry and adopt a holistic approach. Gliga and Evers (2010) were of the view that designing and implementing marketing programs had been challenging for SMEs although marketing could make a real difference for SMEs. Meyer (2018) has argued that SMEs are mostly seen through the lenses developed for LSEs, and it creates a big problem. Another issue is that SMEs are suggested those marketing tools which are originally developed for large businesses hence result in limited scope for SMEs. Farinha and Bagchi-Sen (2019) argued that innovativeness, collective efficiency strategies, and networking enhance the competitiveness of SMEs.

Holland (2017) has described that the brand is derived from the word brandr which means to burn, and it has origins in ancient German Language. It has been argued that branding as a practice is centuries old (Holland, 2017; Bastos & Levy, 2012; Eckhardt & Bengtsson, 2010; Moore & Reid, 2008), its origin has been traced back even before 4000 BC. It is believed that it was even present in the Stone Age (Holland, 2017; Hampf & Lindberg-Repo, 2011) and its use was common for business purposes in the times of Indus Valley Civilization (Moore & Reid, 2008).

In ancient times slaves, livestock, horses, pottery, and other commodities used to be branded by using hot irons resulting in permanent marks. Such marks were used to identify the origin and quality of the product (Moore and Reid, 2008). In Indus Valley Civilization the use of the brand was common even for international trade (Holland, 2017; Bastos & Levy, 2012; Eckhardt & Bengtsson, 2010; Moore & Reid, 2008).

There are five brand characteristics, origin, quality, power, value, and personality, which have evolved over the centuries through different civilizations. For instance, origin and quality have been present in the branding practices of all civilizations from Indus valley (Early Bronze Age, 2250-2000 BC), Shang China (The Middle Bronze Age,2000-1500 BCE), Cyprus (The Late Bronze Age, 1500-1000 BCE), Tyre (The Iron Age Revolution, 1000-500 BCE), Greece (The Iron Age, 825-336 BCE) and Modern. In Cyprus Civilization Value was used in addition to origin and quality as brand characteristics, while Tyre and Greece civilizations used to use branding to convey power and value in addition to origin and quality. The modern age, 20th century and beyond, has witnessed the use of all five characteristics of branding (Moore & Reid, 2008).

Holland (2017) has shown that meanings and purpose of branding have evolved over the years, for example in 3000-1000 BCE brand was used in Egypt, India, China, and Rome for product identification and ownership, while in the 1800s-1950s AD purpose of the brand was to convey quality and earn trust. In the 1950s- 1960s essence of branding was differentiation and earning of loyalty, whereas in the 1970s-1990s principal objective of branding was to give an organization a personality. She is of the view that branding has evolved to the level that in the modern era, 21st century, branding has been chiefly used to create an emotional connection between an organization and its stakeholders.

Eckhardt & Bengtsson (2010) have argued that brands were as dynamic in ancient times as these are today, and brands have not only been important in business but social terms as well. Though the practice of branding is ancient yet it has received the attention of academics mainly in the 19th and 20th centuries (Bastos & Levy, 2012; Hampf & Lindberg-Repo, 2011). Theoretical developments which have contributed to the theory of branding are segmentation (Smith, 1956; Yankelovich, 1964), brand loyalty (Cunningham,1956), lifestyle (Lazer, 1973), brand personality (Martineau, 1958), marketing mix (Borden, 1965), positioning (Trout & RieS, 1972, 1981), social marketing (Kotler & Zaltman,1971), brand equity (Aaker & Equity, 1991), brand identity (Upshaw, 1995), country of origin effect (Bilkey & Nes, 1982) and subcultures of consumption (Schouten & McAlexander, 1995).In modern branding all these concepts are present.

Smith (1956) argued that in the real world competitive markets are imperfect and in imperfect markets, product differentiations and market segmentations are important concepts. Differentiation in products is both intentional and unintentional; in the former organizations try to address the consumer differences and in the latter, these results because of heterogeneous production methods and techniques. He further argues that both product differentiation and market segmentation respectively acknowledge diversity in supply and demand. Furthermore, the use of segmentation as a strategy recognizes the preeminence of customers. Yankelovich (1964) has thrown light on the fact that demographics are not the only variable to be considered for segmentation rather segmentation must be done after exploring all the possible bases on which market can be divided into segments. In his opinion segmentation is not the evidence of the fact that there are different people but the difference between people's values. He has also considered segmentation and branding dependent on each other.

Guest (1964) discussed the relationship between brand preferences and use but his research did not confirm brand loyalty. Martineau (1958) has discussed in his study of retail stores that businesses have personalities like human beings that are attractive to customers. He has discussed that a particular business attracts more customers than other businesses because of its personality liked by customers. Personalities of businesses have characteristics like human personalities. Borden (1964) considered the coining of the term marketing mix as a significant contribution to marketing literature as it organized marketing activities systematically. In his views after the marketing mix framework marketing activities have become more understandable for both practitioners and academicians.

Goi (2009) has submitted that as to the claims of who coined the term marketing mix there are different claims.e.g. Borden (1964) and Mccarthy (1965), however, the framework has evolved over the years. If on one side it has attracted wide acceptance, on the other hand, it has also been criticized. Chowdhury (2013) has elaborated that positioning significantly contributes to branding. Kotler and Zaltman (1971) argued the use of marketing tools for organizations having social purposes. They have also cautioned that such an application does not guarantee any benefit and cost affordability.

Keller (1993) has discussed the concept and implications of customer-based branded equity. This is the difference made by the knowledge of a brand held by a customer while responding to a brand (Farquhar, 1989). This difference can result in positive or negative effects on a brand. He further explained that a comparison between branded and unbranded item can reveal the potential of brand equity. Leone, Rao, Keller, Luo, McAlister and Srivastava (2006) considered brand equity and customer equity-related concepts as both focus on the end-user and emphasized the need of finding a relationship between two concepts. Keller and Brexendorf (2017) have emphasized knowing the sources of brand equity for managers as it helps understand how to have more value.

Leone et al. (2006) have further described that as per Young and Rubicam's Brand Asset Valuator (BAV) model brands have four dimensions such as knowledge, esteem, relevance, and differentiation, according to Millward Brown's Brand Dynamics model there are five levels such as presence, relevance, performance, advantage, and bonding, and as per Brand International, there are three dimensions of a brand such as authority, identification, and approval. Keller, Sternthal, and Tybout (2002) explained that while brand positioning not only it is important to consider points of difference but also the points of parity with other brands and frames of reference in which a brand operates. Chailan (2009) has written that the brand portfolio is the natural arrangement of brands while brand architecture is a thoughtful hierarchical arrangement of brands offered by a firm. Comparing both brand portfolio and brand architecture results in similarities and differences which are important to be understood, and this organization represents the suitability to both consumers and organizations. Keller (2014) is of the view that brand architecture strategy is at the center of brand management which guides which brand elements an organization should apply for new products and services.

Keller (2009) viewed the role of marketing communication gaining more importance in the technology-led changing environment. He has observed that firms now need to choose marketing communication mix artistically and interactivity has to be the essence of brand communication. His argument also supports the notion that brand-based marketing communication makes a significant difference both in the approach and resultant effects. He has cited (Hoeffler and Keller, 2003) in describing the benefits that stem from a brand and these benefits are the perception of a product being better, enhanced customer loyalty, better profit margins, more sustainability in a competitive environment, favorable customer responses to price adjustments and extension opportunities. He also cautioned that these benefits are not the automatic result of branding but the realization of these depends on the skillfulness of an organization.

Keller (2013) has made a golden point by stating that although there are several tools and media of communication yet all have a different purpose, and this is a fact that extant literature has not analyzed communication media from this angle. On brand building Keller (2001) has outlined four steps; identification and association of a brand with a customer, creation of brand meanings in customer mind, obtaining customer responses to understand judgments and feelings, and developing relationship with a customer.

As a point of difference, the brand has attained focal value and both organizations and customers now build their value exchange around brands (Srivastava, 2011). Nandan (2005) has a well-explained difference between brand identity and brand image, according to him, brand identity is the intended message as created by the organization whereas the brand image is the message as perceived by the customer. Both concepts are different but related and important especially concerning the creation of loyalty.

Ghodeswar (2008) has observed that brand building is a holistic process in which both internal and external partners of an organization take part. Country of Origin is an important variable as far as brand building is concerned (Peterson and Jolibert, 1995). Aaker (1997) informed that brands also have personalities and some of the dimensions of brand personalities are excitement, sophistication, sincerity, competence, and ruggedness. Interestingly these dimensions of brand personality have been borrowed from the human personality. Webster and Keller (2004) have enlightened that branding is as important for the B-to-B segment as it is important for the C-to-C segment of the industry, and though there are differences in brand building for the B-to-B segment yet models of brand building in C-to-C can also be used. They have argued that as far as a basic marketing strategy is concerned B-toB and C-to-C organizations are the same rather they have emphasized that a branding strategy for B-to-B firm must be grounded in marketing strategy to be impactful.

Liu, Liu, and Lin (2008) have argued that own brand building in SMEs working as OEMs is affected by two sets of forces namely competence and constraint. According to the competence in the design and development of product positively influences the brand-building whereas concentrated customer structure constraint own brand building.

Hatch and Schultz (2002) have confirmed that the building of corporate brands surely depends on the behavior of the whole organization. Gupta et al. (2010) have argued that the culture of the target market seriously affects brand building. Foscht, Maloles III, Swoboda, Morschett, and Sinha (2008) discussed that change of culture influences brand perception.

According to Zhongqun (2011) Negligence of R&D, lack of core competitiveness, Passive position and lack of initiative in business, Poor reputation and difficulty in winning the trust of international consumers, Excessive competition, Serious product homogeneousness, Lacking strategic awareness of brand management, Neglect of international demands, are issues faced by OEMs/SMEs in building brands.

Centeno, Hart, and Dinnie (2013) argued that the path SMEs take to build a brand is different from the one taken by large scale concerns. In SMEs, the brand-building process is undertaken by both owners and employees with less planning and given resource constraint. They have suggested that SMEs build brands in two stages and five phases. Brand building phases start from a brand as a person goes to brand as a product, brand as a symbol, brand as an organization and ends on brand identity development and brand growth.

Renton, Daellenbach, Davenport, and Richard (2015) are of the view that even small and medium enterprises build brands differently. They have found that small firms focus on communicating and building brand identities whereas medium firms show more risk management in creating brand associations, brand identities, and leveraging alliances. Medium firms also build separate identities for different new products. However, the purpose of both small and medium firms is to do branding for positioning, differentiation, and identity and value communication.

Odoom (2016) has studied brand building in high and low performing SMEs intending to find out any difference in their approach and relationship between branding in SMEs and firm performance. He has argued that low performing firms manage brands informally whereas high performing firms pay more formal attention to brand management. His study has also found a relationship with branding in SMEs and firm performance. His findings are in line with the extant literature.

Hirvonen (2016) has presented in his study that brand development in SMEs is not only as a matter of outsourcing but also of insourcing. His propositions are unique in the sense that extant literature mostly discusses the outsourcing of branding in SMEs. In his proposed model first SMEs outsource branding to the network partners and then insource with their help after realizing the importance and benefit of branding. In the outsourcing stage, the network partner takes an active role while the role of the SME is passive, whereas in insourcing SME takes the active role with the role of external partner as of support.

Lee, Song, and Kwak (2015) have studied those Korean international firms which have transformed or attempted to transform from Original Equipment Manufacturing status to the status of Original Brand Manufacturing. They have found that such firms have taken a different path of transformation from their forerunners but not the unique paths. Their paths are a combination of forerunners' strategies and their strategies. During transformation, the firms have faced serious reactions from the incumbent firms in the form of counterattacks and intellectual property lawsuits. The counterattacks included discontinuation of orders as OEMs, price wars, etc. The successful firms have succeeded because of being well prepared for challenges. Some firms failed because of shortages of resources to cope with the challenges. They have recommended full government and policy support for such firms to increase the possibility of successful transformation. They have also recommended such investigations in different contexts.

Kennedy and Wright (2016) have noted that literature is scarce on branding concerning micro and small businesses. They have argued that there is not only insufficient literature on branding in micro and small firms but also there is less understanding of the phenomenon among small business owners. They have found that owners in micro and small firms are less aware of branding, brand management, and its resultant benefits. They have recommended more and more studies related to branding in micro, small, and medium firms at the national and international levels.

Mitchell, Hutchinson, Quinn, and Gilmore (2015) have studied branding in SME retailers to propose a framework. Their findings contribute well to the literature on SME branding practices. They have found that brand building in retail firms does affect the manufacturing firms in both ways. They are of the view that branding in SMEs mainly depends on the owner-manager. His vision, commitment, and skills can make a real difference. In their opinion SMEs take a careful approach in a brand-building because of resource constraints and other risk factors. They have also mentioned that branding offers significant benefits to SMEs and there is a growing focus on SME branding in the literature.

Yan et al. (2014) have argued that the transformation of Original Equipment Manufacturing (OEM) firms to Original Brand Manufacturing (OBM) firms depends on the strategic leadership competence which could maintain a balance between stability and change. They have revealed that such an attempt involves high risk, therefore, requires careful strategy. They have observed that the firms which managed to transform into OBM first gained capital and capability by working as OEM with global players and then utilized the acquired capability. They have recommended to aspiring firms to learn to manage their OEM and OBM operations separately without annoying the incumbent firms.

Tavares (2015) has argued that SMEs understand and approach branding and brand building differently from the large scale concerns. Their approach to branding is efficient in their context. He has also emphasized more studies in national and internal contexts to further evolve a model of brand building in SMEs.

Du Plessis et al. (2015) have emphasized that brand building in SMEs mainly depends on the vision and commitment of the owner. In their view, SMEs build a brand identity based on the owner's vision, a product's unique quality, and country of origin. They have also discussed that brand management is a new phenomenon for SMEs. They have highlighted that financial constraint, lack of relevant managerial human resources, technological inability, the culture of the firm, and less interest are the main barriers to branding in SMEs.

Odoom, Narteh, and Boateng (2017) have argued that small- and medium-sized enterprises (SMEs) contribute significantly across several economies, and research into their branding strategies is growing over the years. But, the literature on SMEs is vague and dispersed. They have studied literature by using a systematic review of peer-reviewed journal publications focusing on branding within the context of SMEs. They have reviewed the papers published from 2004 to 2014. In their view, although there is progress in the field yet a lot requires to be done. They have found theoretical, methodological, and empirical gaps in the domain. They have recommended more theoretical and empirical studies in various contexts using different methodologies. They have specially recommended research studies using a mixed-method approach.

Raki and Shakur (2018) have explored in the Malaysian context that among SME development institutions brand orientation is from high to medium to low. Brand consciousness is increasing in the B-to-B context and it is argued that the sector can equally benefit from the approach; this has also been learned that in the B-to-B sector functional characteristics outperform emotional characteristics (Yieh, Yeh, Tseng, Wang and Wu, 2018). Odoom and Mensah (2019) are of the view that in SMEs social media and innovation capabilities play a moderating role between brand performance and brand orientations, and it is suggested to brand owners to select capabilities keeping in view their size. Digital developments and issues of sustainability are of paramount importance for B-to-B SMEs interested in brand developments (Nyström, Törnroos, Koporcic and Ivanova-Gongne, 2018). Siddiquie (2018) has argued that most of the SME owners lack knowledge on branding.

ElMassah, Michael, James and Ghimpu (2019) in the result of a mixed-method study have confirmed that brand entrepreneur does play a role in attracting finance for the startup venture. Al Asheq (2019) confirmed that brand orientation in SMEs positively affects firm performance. Bakshi (2019) argued that digital technology opens up new ways for SMEs to build brands and reduce costs. Renton and Richard (2019) are of the view that for brand governance in SMEs there is a need to have a dialogue with customers using interactive media. Abubakar, Hand, Smallbone, and Saridakis (2019) revealed that the institutional environment in which SMEs of LDCs operate is hostile compared to developed countries. Owing to these determinants of innovation in SMEs in LDCS are also different and largely unexplored. They have further argued that innovation in SMEs is not only important for economic development but also their internationalization.

RESEARCH METHODOLOGY

Research questions and objectives of the study required to deeply understand the phenomenon of not introducing product brands by developing country SMEs in international markets. It also required finding out the reasons and factors which might sufficiently explain the problem. For answering the research question it was also important to understand the context in which firms operated. It was also learned during the review of literature that no theory could sufficiently explain the problem, hence there was a need to build a theory in this regard. Creswell (2007); Creswell, Hanson, Clark Plano, and Morales (2007) have discussed that when a problem needs to be deeply understood, sufficiently explained and theory needs to be developed the most suitable form of inquiry is the blend of qualitative and quantitative research. In his opinion, in such type of study, you first need to go to the natural settings, meet respondents personally, listen to their views openly, observe their contexts and develop explanations out of it. Bryman and Bell (2015); Saunders (2011); Sekaran and Bougie (2016); Walliman (2005) are also of the same view. Based on this, the type of inquiry is Mix Methods. For such situations, Mix Method Research has also been recommended (Creswell et al., 2007; Greene, Caracelli, & Graham, 1989; Hoepfl, 1997; Kumar & Phrommathed, 2005; Morgan, 1998, 2007; Morrow, 2007; Morse, 1994; Sofaer, 1999; Tashakkori & Creswell, 2008; Teddlie & Tashakkori, 2003).

Keeping in view the study aim mix method approach was used to conduct the study. In a mixed-method Exploratory Sequential

Design (Creswell, 2013) was used. Initially, factors affecting product brands were explored through expert interviews and focus groups. After exploring factors, a questionnaire was developed and used to confirm the factors through survey research. Respondents of the research were surgical export firms of two different sizes; small and medium selected based on recommendations of SIMAP, convenience, and agreement of firms.

This study was conducted on export firms of the surgical industry of Sialkot. As informed by the SIMAP (Surgical Instruments Manufacturers Association of Pakistan) there were more than 3000 firms of different sizes working in the industry but SIMAP had a record of about 1000 active member firms. It was discussed with SIMAP that the researcher wanted to randomly select the firms for a survey but he was informed that based on the track record mostly firms do not cooperate with researchers unless the personal recommendations and relationships of SIMAP officials are used, the same is also reported in (Sandhu et al., 2011).

Keeping this in view it was decided to use a three-pronged strategy for the survey; distributing questionnaires in print form to all firms concerning SIMAP officials, distribution of questionnaires through email by SIMAP Official, and by the researcher himself through email.

A total of 100 valid responses were received; 45 from the firms who were distributed questionnaires in print by SIMAP and 55 electronically. The low response rate is typical in the case of SMEs (Newby, Watson, & Woodliff, 2003).

In the first part of the study five interviews of surgical exporting firms and a focus group of the owners of ten firms were conducted. For the second part of the study data collection instrument, the questionnaire was used. The questionnaire was designed based on the factors identified from the literature and the first part of the study.

Methods and results of the first part of the study have been discussed elsewhere; this paper specifically focuses on the selected methods and results of the second part of the study. Based on the factors explored from the literature and qualitative part of the study operational definitions were determined/adopted. Based on the operational definitions items for each construct/latent variable were designed/developed. There was a total of 23 constructs for which 81 items were developed using a 1-7 Likert type scale.

The questionnaire was then sent to more than 1000 firms multiple times using in-person distribution, postal, and email. A complete response from only 100 firms was received. Data collected was analyzed using Smart PLS as the technique/tool was suitable for the following situation:

1. In social science research where sample is small.
2. Data are not normal.
3. Research is exploratory and scale is developed for the first time (Hair, Sarstedt, Hopkins, & G. Kuppelwieser, 2014; Hair, Sarstedt, Pieper, & Ringle, 2012; Hair, Sarstedt, Ringle, & Mena, 2012; Hair, Hult, Ringle, & Sarstedt, 2016; Henseler, Ringle, & Sinkovics, 2009; Ringle, Sarstedt, & Straub, 2012).

ANALYSIS, RESULTS, AND DISCUSSION

Since one of the underlying objectives of the study is to provide a theoretical explanation that hinders international SMEs from introducing their product brands in the international market(s) therefore it is pertinent to categorize these factors into a more meaningful way. All factors external to a firm, as a barrier in the way of introducing own brands in the international market, have been grouped and categorized as Environmental Factors while factors internal to a firm have been categorized as Organizational Factors, Entrepreneurial Factors, and Marketing Factors. The categorization is presented in Table 1.

Table 1: *Higher Order Factors*

Sr.	Main Factors/Groups	Factors/Variables
A.	**Organizational Factors** Elements inside the organization that affect its working are known as internal or organizational factors. These are also known as characteristics of an organization (Johnson, 2016).	Inconsistent Organizational Policies Size of the Firm Structure of the Firm History of firms/industry as a vending sector Organizational Culture Limited Competence Base Limited Resource Base Negligence of R&D Lack of core competitiveness
B.	**Entrepreneurial Factors** "*Entrepreneurs work under the constraints of their environment -- the political economy. Five factors will be key to entrepreneurial success: creativity, tolerance for risk, responsiveness to opportunities, leadership, and the ability to take advantage of the rights afforded to you*." (http://smallbusiness.chron.com/5-key-factors-influence-entrepreneurship-18541.html)	Risk Aversion of Firms Complacency of Entrepreneur Limited Vision of the Entrepreneur
C.	**Marketing Factors** According to the American Marketing Association marketing includes all activities of an organization that are concerned with the creation, communication, and delivery of value to the customer with a focus on maintaining long term profitable relationships (Kotler & Armstrong, 2013).	No linkages with End Users/ Local Health Industry/Hospitals Neglect of international demands Lack of international distribution network Serious product homogeneousness Lacking strategic awareness of brand management
D.	**Environmental Factors** All the elements outside an organization which has the potential to affect its working form its environment (Daft & Marcic, 2016).	Weak National Intellectual Property Infrastructures Lack of Government Support Competition with sophisticated Firms Negative Country of Origin Effect National Culture

a. Table 1 demonstrates the theoretical conceptualization of the study of different factors that hinder SMEs from introducing their brands in the international market. The twenty-two (22) factors have been divided into four main groups/categories; Organizational Factors, Entrepreneurial Factors, Marketing Factors, and Environmental factors. The first three groups/categories represent the factors internal to a firm while the last one represents factors external to a firm. Out of seventeen internal factors, nine have been grouped/categorized as Organizational, three Entrepreneurial, and five as Marketing, while five external factors have been categorized as Environmental.

b. All internal factors which are specific to an entrepreneur/owner-manager and depend on him/her have been categorized as Entrepreneurial, factors which are internal but deals with products, customers, customer relations, market demand, and product distribution have been categorized as Marketing, and all other internal factors dealing with a firm, its size, structure, resources, competencies, routines, and policies have been categorized as Organizational. All external factors have been categorized as Environmental because all actors/factors/forces outside a firm with the ability to affect/influence its working are termed as Environmental.

Higher-Order Factors

Let us now discuss each factor in relation to its category and the brand-building ability of a firm. Let us start from Organizational factors:

Organizational Factors

c. **Inconsistent Organizational Policies:** As the name shows the factor is about the policies a firm makes regarding its decisions, especially the long term, to run business. In SMEs, it is a problem that ownership changes over time, and with the change of ownership policies also change. Brand building requires long term consistent policies that may require the contribution of generations therefore inconsistency of policies in SMEs becomes a hindrance in building own brands.

d. **Size of the Firm:** Size of a firm is an important organizational factor in the sense that it serves as the determinant of the resources and competences a firm can afford for any activity/initiative. The size of an SME is mostly small and becomes a hindrance in the way of introducing their own brand because brand building requires a considerable amount of investment of resources over the long term.

e. **Structure of the Firm:** Since brand building requires consistent institutional effort, therefore, it requires a formal organizational structure. Since SMEs mostly have an informal organizational structure, revolving around the entrepreneur, it becomes a hindrance in the way of building a brand. This is also appropriate to note that the size and structure of a firm are closely related and also have the ability to shape policies in an organization.

f. **History of a Firm/Industry as a vending sector:** The history of a firm does influence the choices it makes for the present and future (Gruber, 2010; Liebowitz & Margolis, 1995). Firms in the surgical industry have been acting as vendors over the years and this with a success as well. Therefore, in a way firms are locked-in as far as their role in the value chain is concerned. This certainly hinders firms to upgrade in the value chain and introduce their own brands.

g. **Organizational Culture:** The culture of a firm is a critical organizational factor that plays a significant role in building brands for a firm. Brand building especially requires an open culture that allows sufficient freedom for employees to explore and experiment with new methods and techniques as well as promotes close working with other firms. It has been observed that the culture of firms in the surgical industry is not such that allows exploration, experimentation, and collaboration therefore organizational culture hinders own brand building.

h. **Limited Competence Base:** Inventory of competences of a firm has a critical role in performing the respective activity (Freiling, 2004; Freiling, Gersch, & Goeke, 2008). If a firm lacks the required competencies for brand building it will not be able to build own brand. In the surgical industry generally, firms lack the due competence in brand building, even the firms highly willing for branding find them in problem as to the building of a brand.

i. **Limited Resource Base:** Like the competence-base endowment of resources to pursue a purpose is also critical for a firm (J. B. Barney, 1996; J. B. Barney, Ketchen Jr, & Wright, 2011). This is certainly a resource base that makes a difference in terms of introducing own brand. The firms in the surgical industry have limited resources base which serves as a hindrance to introducing own brand in the international market.

j. **Negligence of R&D:** Organizations' investment in R&D has direct relevance with their innovativeness and performance (Beld, 2014; Gui-long, Yi, Kai-hua, & Jiang, 2017; Hoffman, Parejo, Bessant, & Perren, 1998), the same is true concerning brand building especially in international markets. Data of the study showed that generally firms in the surgical industry neglect attention to and investment in R&D. This is also a general observation about the industry that firms lack the competence to undertake R&D.

k. **Lack of Core Competitiveness:** Having a brand in international markets requires a firm to be able to meet the required quality standards and other requirements. Firms in the industry generally find themselves lacking in meeting all the standards prescribed by international markets. This lacking core competitiveness is a hindrance to brand building.

Entrepreneurial Factors

a. **Risk Aversion of Firms:** One implication of having a brand is that you have to take responsibility for any adverse effects of your product; this is indeed a matter of great risk. Unless a firm is ready for this it cannot have its own brand. Entrepreneurs in the surgical industry were reported to be avoiding any such risk, and their such behavior hinders firms to have own brands.

b. **The complacency of Entrepreneur:** Beyond doubt, the brand-building requires one to come out of the comfort zone, and it may result in undesirables such as losing the current status. Entrepreneurs unless choose to live out of comfort zone brand building is not possible.

c. **Limited Vision of the Entrepreneur:** This is the matter of having the vision to be able to recognize the importance of branding in the life and progress of a firm. An entrepreneur's basic role in a firm is to give a vision for progress. If an entrepreneur lacks vision own brand building is not possible.

Marketing Factors

a. **No linkages with End Users/ Local Health Industry/Hospitals:** This has been highlighted as one of the reasons that firms in the surgical industry do not have brands because these do not have linkages with the end-users of their products. Branding requires having close linkages with end-users to fully understand what they need. Having no linkages with end-users is a hindrance in the way of having brands. When a firm does not have linkages with end-users it does not only miss the opportunity to understand what end users want but also loses the opportunity of being recognized among ultimate consumers.

b. **Neglect of international demands:** Brand is what cares about the market demand, and in the case of the international market this becomes even more important. One of the factors that explain why SMEs do not have product brands in the international market is that these neglect the demands of the international market.

c. **Lack of International Distribution Network:** This is a distribution network that makes and breaks a brand both in national and international markets. Establishing a distribution network in any market requires resources and skill if these are not present brand building is nearly impossible. Firms of the surgical industry are currently lacking both ability and access to the distribution network required to build a brand.

d. **Serious Product Homogeneousness:** One aspect of branding is about being different and differentiated, and this is generally achieved through product and its features. If firms in an industry deal with similar products, then it becomes difficult to differentiate and build brands. One hindrance in the way of building product brands by firms in the surgical industry is that firms deal with similar products leaving almost no margin to be differentiated.

e. **Lacking Strategic Awareness of Brand Management:** This factor explains two important aspects; one is that firms do not realize the importance of having brands, and secondly firms do not have the required expertise required to build brands.

Environmental Factors

a. **Weak National Intellectual Property Infrastructures:** If building brands require a reasonably huge investment of resources and competence it also requires protection, and protection requires a sound infrastructure of intellectual property rights. In Pakistan, intellectual property infrastructure is not sound and firms do not feel protected in terms of intellectual property rights. This has overwhelmingly been reported as the main reason firms do not have bands; hence it is a critical hindrance.

b. **Lack of Government Support:** One way or another branding by SMEs is difficult with the support of the government as described by the firms. For having brands firms have to fulfill quality and other requirements which are indeed so expensive to be out of the reach of an individual firm. Lak of Government Support, therefore, has become a barrier to introduce product brands in the international market.

c. **Competition with Sophisticated Firms:** In the industry the firms which are even perceived as large have not made any effort to have their own product brands, what explains in their case is the anticipated competition and reaction from the large-scale international firms. Both extant literature and our data support the factor. It has been reported in the literature that brand building by Korean and Chinese firms resulted in severe reactions from the incumbent firms; the reaction was so severe that many latecomer firms could not survive.

d. **Negative Country of Origin Effect:** This is an old factor reported in the literature as a barrier of branding for any firm. One fear among surgical firms is that if they offer their own brand in international markets it will not be accepted owing to the negative country of origin effect.

e. **National Culture:** Generally, a firm like others is the product of its national culture; hence it can be a facilitator or barrier. In this case, national culture hinders brand building.

This part of the paper deals with the assessment of higher-order constructs as theoretically described in Table 1. Table 1 has categorized 22 constructs into four (04) groups such as Entrepreneurial Factors, Environmental Factors, Organizational Factors, and Marketing Factors. Constructs have been categorized into Higher Order Constructs to make both theoretical and statistical models more parsimonious (Hair et al, 2016.P, 229).

For the evaluation of the higher-order constructs guidelines of Becker, Klein, and Wetzels (2012) have been followed. As per the guidelines repeated indicator approach has been used as it produces less biased, more reliable, and precise construct scores for higher-order constructs in the case of Reflective-Formative type models. The repeated indicator approach is defined as in Becker et al., (2012):

> *For the repeated indicator approach, a higher-order latent variable can be constructed by specifying a latent variable that represents all the manifest variables of the underlying lower-order latent variables.*

As required in Becker et al., (2012) below is the summary of the reporting which will be discussed in detail:

Table 2: *Guidelines for Using Reflective-Formative Type Models*

1.	**Type of Higher-Order Model**	Reflective-Formative Type
	Approach to estimate the Higher-Order Variable Model	Repeated Indicator
2.	**Measurement Mode on the Higher-Order Constructs**	Mode B
	Weighting Scheme Used for the PLS-SEM Algorithm.	Factor
3.	**Assessment of the Appropriateness of the First-Order Constructs**	As First-Order Constructs are Reflective therefore Indicator loadings, AVE, Composite Reliability, Discriminant Validity (Cenfetelli & Bassellier, 2009; Chin, 1998; Fornell & Larcker, 1981; Hair et al., 2012; Hair et al., 2012) are used.
4.	**Assessment of the Appropriateness of the Higher-Order Constructs**	Higher-Order Constructs are Formative therefore Indicator Weights, Significance of Weights, and Multicollinearity of Indicators are used.

Becker, J. M., Klein, K., & Wetzels, M. (2012). Hierarchical latent variable models in PLS-SEM: Guidelines for using reflective-formative type models. *Long Range Planning*, *45*(5-6), 359-394.

For running the higher-order Model in PLS-SEM using Smart PLS 3 all 22 original constructs have been used.

Assessment of the Appropriateness of the First-Order Constructs

As First-Order Constructs are Reflective therefore Indicator loadings, AVE, Composite Reliability, Discriminant Validity (Cenfetelli & Bassellier, 2009; Chin, 1998; Fornell & Larcker, 1981; Hair et al., 2012; Hair et al., 2012) have been used.

Let's first discuss Composite Reliability and AVE, Table 3 in annexure shows the results:

The table shows that only 10 lower-order constructs are found reliable on the cut of value 0.70 of composite reliability while only 10 have met the criteria of convergent validity with AVE above 0.50. There are only 8 constructs that meet both the criteria of composite reliability and convergent validity. This state of the affair may be possible because of the low loading values of some indicators.

After deleting 10 indicators with loading values below 0.40 it has been observed that composite reliability for three (3) more constructs and AVE for more eight (8) constructs have improved meeting the cut off values. Table 4 in annexure shows that there are fifteen (15) constructs that have a composite reliability score above 0.60, allowed in exploratory research, and sixteen (16) constructs having AVE above 0.50. There are now eleven constructs that have met both the criteria of composite reliability and AVE.

There are now seventeen (17) constructs with composite reliability scores above 0.60 and seventeen (17) constructs with AVE above 0.50. Thirteen constructs have met both the criteria of composite reliability and AVE. Discriminant Validity scores, Cross loadings, and Fornell-Larcker criteria below, Tables 6 and 7, show that constructs and indicators have higher discriminant validity Loadings.

Assessment of the Appropriateness of the Higher-Order Constructs

For the evaluation of higher-order constructs Indicator Weights, Significance of Weights, and Multicollinearity of Indicators have been used as higher-order constructs are formative. Results showed that values were well within the criterion of VIF 0.2 to 5, therefore it is clear that there is no collinearity issue reported. Results show that path coefficients after bootstrapping which was run with 500 samples at 0.10 significance level, as recommended for exploratory studies. It is depicted by results that out of three constructs forming a higher-order construct of Entrepreneurial Factors, two, Complacency of Entrepreneur and Limited Vision of the Entrepreneur, are significant as shown by the P values and T statistics. One construct, Risk Aversion of Firms, is not found significant. As shown in Figure 2, as given in annexure, indicator weights of three constructs are 0.527, 0.614, and 0.094 respectively.

In the case of the second higher-order construct Environmental Factors, four, Lack of Government Support, Weak National Intellectual Property Infrastructure, National Culture and Negative Country of Origin Effect, forming lower-order constructs are found significant as suggested by the P values and T statistics, while one lower-order construct, Competition With Sophisticated Firms, is not found significant. Indictor weights of five forming constructs are 0.395, 0.441, 0.173, 0.253 and 0.147 respectively. In the third higher-order construct Organizational Factors out of nine only four lower-order constructs, Limited Competence Base, Limited Resource Base, Negligence of R&D, and Organizational Culture, are found significant while five, History of firms/industry as a vending sector, Inconsistent Organizational Policies, Lack of core competitiveness, Size of the Form and Structure of the Firm, are insignificant. Indicator weights of all constructs are 0.184, 0.250, 0.334, 0.328, 0.105, 0.075, 0.052, -0.301 and 0.052 respectively.

Five out of five lower-order constructs, Lack of international distribution network, Lacking strategic awareness of brand management, Neglect of international demands, No linkages with End Users/ Local Health Industry/Hospitals, and Serious Product Homogeneousness, forming the fourth higher-order construct Marketing Factors are found significant as shown by the P values and T statistics in Table 4. Indicator weights of all constructs are 0.308, 0.312, 0.238, 0.309 and 0.435 respectively.

Discussion

All the four originally proposed higher-order constructs, are retained because of statistical significance, out of these four, three are internal and one is external. Environmental Factors represent all external factors that serve as a barrier to product branding of international SMEs in international markets. Contrary to the originally proposed five lower-order constructs/variables only four are found significant which are discussed one by one. The first factor serving as a barrier to product branding is the Negative Country of Origin Effect, this factor has been widely discussed in extant literature (Spence & Hamzaoui Essoussi, 2010) as a barrier to branding for any firm and the same has been confirmed by the survey. Country of Origin Effect significantly influences consumer behavior especially in international business (Kala, & Chaubey, 2016; Apetrei & Petrusca, 2010). If a country does not enjoy good repute outside then it becomes difficult for its firms to have brands in international markets (Adina, Gabriela & Roxana-Denisa, 2015), and this factor is external to a firm and impossible to control. The second external factor is National Culture which has also been discussed in the literature (Cerović & Tomašević, 2006; De Mooij & Hofstede, 2010; Harun, Wahid, Mohammad & Ignatius, 2011; Sumaco, Imrie & Hussain, 2014) as a contributor or barrier to branding in the international markets. As brand building requires innovativeness and long term commitment, if the culture of a country lacks these values then it becomes difficult to have brands of its origin in the international market. In the current study, National Culture has been confirmed as a barrier to branding if desired values of innovativeness and long term orientation are lacking. This is also a factor external to a firm and uncontrollable for it.

The third external factor is Lack of Government Support which has been overwhelmingly referred by the surgical firms in the survey conducted for this study. According to firms brand building requires assurance of a certain level of product quality through laboratory tests which are both too expensive to be affordable for an individual firm and unavailable domestically. For such tests, government support is direly needed which if not available becomes a barrier for branding. Another area where government support is instrumental for SMEs is helping in having access to international customers and subsidizing marketing expenses for brands.

The fourth external factor is Weak Intellectual Property Infrastructure as described by the study respondents. This is a strong system of intellectual property rights which can assure a firm that its investment in branding is safe and only it will reap the fruits of branding. If a firm is afraid of being copied by other firms then it becomes a discouragement for a firm to invest in branding. Logically these four external factors serving as a barrier to the product branding by SMEs in international markets are interrelated too. National Culture influences the way governments operate, people have respect for intellectual property (Qi & Mensah, 2011) and others perceive a country. Similarly, it is the role of the government to positively influence the national culture (Coyle & Ellis, 1994), assure strong intellectual property infrastructure, and take measures to improve the better country image outside (Ding, 2011). Having a strong intellectual property infrastructure sends a positive message to the outside world and represents a national culture with positive values (Anholt, 2005, October).

Entrepreneurial Factors, Organizational Factors, and Marketing factors represent internal factors serving as barriers to SME product branding in international markets. Under Entrepreneurial Factors, Limited Vision of the Entrepreneur and Complacency of Entrepreneur are two factors that explain why SMEs don't have product brands in international markets. Having brands represent a futuristic approach which is the result of having a vision. If an entrepreneur does not have a vision then branding will not be his priority, the point has been argued both in literature and survey. This is also true that if an entrepreneur is contented with the current business performance without brands then he will less likely go for bearing the pains associated with branding. Most of the entrepreneurs in the surgical Industry of Pakistan are earning profits without brands therefore they are complacent and less inclined to branding. Interestingly Limited Vision of the Entrepreneur and Complacency are interrelated; having a vision does not let an entrepreneur be complacent.

Organizational factors represent four internal factors; Limited Resource Base, Limited Competence Base, Negligence of R&D, and Organizational Culture, which serve as a barrier to product branding in SMEs. The building of product brands, especially in international markets, requires a commitment of resources for a long term, specialized skills, continuous research and development, and a culture that allows intra firm and inter-firm knowledge sharing and innovation. All these four factors have been discussed in the literature and endorsed by the survey as barriers to branding in SMEs. This is also important to note that branding is a way to earn competitive advantage and the competitive advantage of a firm depends on its resource base as argued by the resource-based view of a firm (J. Barney, 1991; Peteraf, 1993; Wernerfelt, 1984). If a firm has a limited resource base then it is a barrier for it to build its product brands. Limited competence-base also plays the same role as played by Limited Resource Base. Branding requires a good understanding of market and technology dynamics which requires continuous R&D in a firm, therefore if a firm neglects R&D it is not possible to have brands. The factor has been well discussed in the extant literature and the survey of this study. Organizational Culture is the fourth internal factor under the umbrella of Organizational factors which throws light on why SMEs don't have product brands. Brand building requires an open culture that encourages intra and inter-firm knowledge sharing which generally lacks in SMEs. Organizational culture as a source of competitive advantage is well argued in the literature (J. B. Barney, 1986). These four internal factors are also interrelated such as Organizational Culture and Negligence of R&D, and Limited Resource Base and Limited Competence Base.

The third group of five internal factors is represented by Marketing Factors; Serious Product Homogeneousness, Lack of International Distribution Network, Lacking Strategic Awareness of Brand Management, Neglect of International Demands, and No Linkages With End Users/Local Health Industry. These factors have been mentioned both in the literature and the survey of this study. The brand is built on the point of difference but if in an industry firms produce homogeneous products then it becomes difficult to build product brands. The building of brands in international markets depends on having a distribution network which generally lacks in the case of SMEs. Branding also requires understanding that it is a long-term process to build brands and short-term orientation does not serve the purpose. Understanding and fulfilling the demands and requirements of international markets is a prerequisite to branding which if not paid attention to becomes a barrier. A brand is the name of trustworthy relation a firm has with its buyers therefore if a firm does not have linkages with end-users of a product it faces difficulties in building brands.

Figure 2 & 3 offers 4-Factors explanation to the phenomenon that what hinders international SMEs from introducing own product brands in international markets. The factors that hinder SMEs form brand building are Environmental, Entrepreneurial, Organizational, and Marketing.

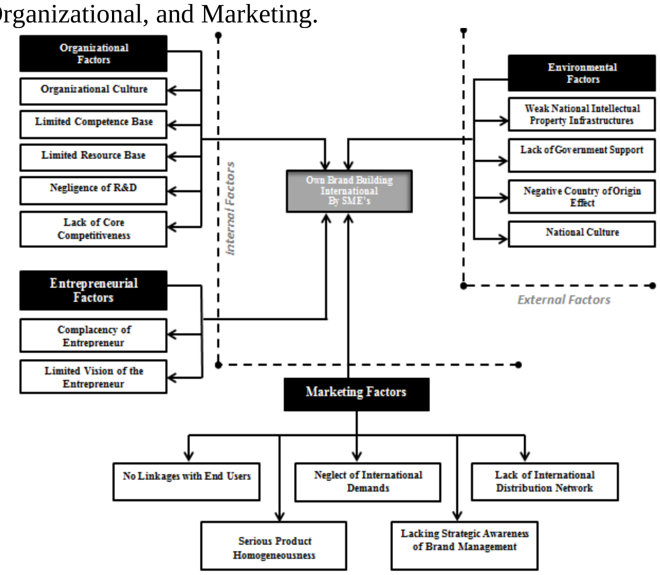

Figure 3: *Four-Factor Explanation on Working of SMEs without Product Brands*

Under the umbrella of factors internal to a firm, these are limited vision and complacency of entrepreneurs, Entrepreneurial factors, limited resource base, negligence of R&D, limited competence-base and organizational culture, Organizational factors, no linkages with end-users, neglect of international demands, lack of strategic awareness of brand management, lack of international distribution network, serious product homogeneousness, Marketing factors, that explain the SMEs operating without product brands in international markets despite being in the business for years. Under the shed of external factors, the same is explained by negative country of origin effect, national culture, lack of government support, and weak national intellectual property infrastructure, Environmental factors. This Four-Factor Explanation to the phenomenon is the contribution of the study to the body of knowledge which can further be refined with future research.

Concluding Remarks & Future Research

Four-Factor Explanation does not only add to the understanding of theorists and academicians that what hinders international SMEs from introducing own product brands in international markets but also offers a good foundation to practitioners, International SMEs operating in international markets, and policymakers to work out a plan to enable SMEs to introduce own product brands in international markets. Policymakers at the government level can learn from Environmental Factors that unless priorities are set to work on the improving country's image outside, government support for SMEs and strengthening of intellectual property rights infrastructure SMEs will go on facing difficulty in introducing brands. Entrepreneurial Factors offer good insight to individual entrepreneurs that branding requires and entrepreneur to broaden his/her spectrum and come out of the comfort zone.

A firm and industry level Organizational and Marketing Factors provide a guideline to build strengths for the brand building. Firms should plan to gather resources and competencies required for the purpose, necessary changes in the culture are also desirable. Working to build distribution networks in international markets and fulfillment of quality requirements of international markets is also of paramount importance for product branding.

The study has not been without limitations like any other study; the main limitations of the study are limited industrial context and sample size. It was the desire to have the larger sample size and participation from more than one industry but owing to multiple factors, limitation of time, lack of cooperation of respondents, and limitation of other resources being the main factors, the desire could not be materialized, becoming the reason of limitations of the study.

Limitations of the study offer ground for future research to come into play, recommendations are to conduct studies in different industries of Pakistan and industries of other developing countries having a similar context using the research design of the study. Testing of Four-Factor Explanation in multiple contexts will also be another opportunity for future researches.

References

Abimbola, T., & Vallaster, C. (2007). Brand, organisational identity and reputation in SMEs: an overview. *Qualitative market research: an international Journal*, *10*(4), 341-348.

Abor, J., & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. *International research journal of finance and economics*, *39*(6), 215-228.

Aaker, D. A., & Equity, M. B. (1991). Capitalizing on the Value of a Brand Name. New York, 28, 35-37.

Aaker, J. L. (1997). Dimensions of brand personality. *Journal of marketing research*, *34*(3), 347-356.

Abubakar, Y. A., Hand, C., Smallbone, D., & Saridakis, G. (2019). What specific modes of internationalization influence SME innovation in Sub-Saharan least developed countries (LDCs)?. *Technovation*, *79*, 56-70.

Al, R., & Jack, T. (1981). Positioning: The battle for your mind. New York: McGrawHill.

Adina, C., Gabriela, C., & Roxana-Denisa, S. (2015). Country-of-origin effects on perceived brand positioning. *Procedia economics and finance*, *23*, 422-427.

Agwu, M. O., & Emeti, C. I. (2014). Issues, challenges and prospects of small and medium scale enterprises (SMEs) in Port-Harcourt city. *European Journal of Sustainable Development*, *3*(1), 101-114.

Al Asheq, A. (2019). SME performance: impact of market, customer and brand orientation. *Academy of Marketing Studies Journal*, *23*(1).

Anholt, S. (2005, October). Plug into your national brand. In *International trade forum* (No. 4, p. 20). International Trade Centre.

Apetrei, A., & Petrusca, C. (2010). Country-of-Origin Effect in International Trade. *Timisoara Journal of Economics*, *3*(4 (12)), 271-276.

Aragón-Sánchez, A., & Sánchez-Marín, G. (2005). Strategic orientation, management characteristics, and performance: A study of Spanish SMEs. *Journal of small business management*, *43*(3), 287-308.

Ates, A., & Bititci, U. (2011). Change process: a key enabler for building resilient SMEs. *International Journal of Production Research*, *49*(18), 5601-5618.

Bakshi, A. (2019). Gearing Up Small Businesses for Marketing in the Digital Space: An Exploratory Study. *Available at SSRN 3309290*.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99-120.

Barney, J. B. (1986). Organizational culture: can it be a source of sustained competitive advantage? *Academy of management review*, *11*(3), 656-665.

Barney, J. B. (1996). The resource-based theory of the firm. *Organization science*, *7*(5), 469-469.

Barney, J. B., Ketchen Jr, D. J., & Wright, M. (2011). The future of resource-based theory: revitalization or decline? *Journal of Management*, *37*(5), 1299-1315.

Bastos, W., & Levy, S. J. (2012). A history of the concept of branding: practice and theory. Journal of Historical Research in Marketing, 4(3), 347-368.

Becker, J.-M., Klein, K., & Wetzels, M. (2012). Hierarchical latent variable models in PLS-SEM: guidelines for using reflective-formative type models. *Long range planning, 45*(5-6), 359-394.

Beld, B. (2014). *The effects of R&D investment on firm performance.* University of Twente.

Birnik, A., Birnik, A.-K., & Sheth, J. (2010). The branding challenges of Asian manufacturing firms. *Business Horizons, 53*(5), 523-532.

Bilkey, W. J., & Nes, E. (1982). Country-of-origin effects on product evaluations. Journal of international business studies, 13(1), 89-100.

Borden, N. H. (1964). The concept of the marketing mix. *Journal of advertising research*, *4*(2), 2-7.

Bos-Brouwers, H. E. J. (2010). Corporate sustainability and innovation in SMEs: evidence of themes and activities in practice. *Business strategy and the environment*, *19*(7), 417-435.

Bryman, A., & Bell, E. (2015). *Business research methods*: Oxford University Press, USA.

Cant, M. C., & Wiid, J. A. (2013). Establishing the challenges affecting South African SMEs. *The International Business & Economics Research Journal (Online)*, *12*(6), 707.

Carpenter, S. (2018). Ten Steps in Scale Development and Reporting: A Guide for Researchers. *Communication Methods and Measures*, *12*(1), 25-44.

Cenfetelli, R. T., & Bassellier, G. (2009). Interpretation of formative measurement in information systems research. *MIS quarterly*, 689-707.

Centeno, E., Hart, S., & Dinnie, K. (2013). The five phases of SME brand-building. *Journal of Brand Management, 20*(6), 445-457.

Cerović, Z., & Tomašević, A. (2006). The impact of national culture on the corporate culture in global hotel companies. *Tourism and Hospitality Management*, *12*(2), 93-102.

Chailan, C. (2009). Brand architecture and brands portfolio: a clarification. *EuroMed Journal of Business*, *4*(2), 173-184.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, *295*(2), 295-336.

Chittithaworn, C., Islam, M. A., Keawchana, T., & Yusuf, D. H. M. (2011). Factors affecting business success of small & medium enterprises (SMEs) in Thailand. *Asian Social Science*, *7*(5), 180-190.)

Chowdhury, P. P. (2013). Key strategies and issues of positioning: A review of past studies. *American academic & scholarly research journal*, *5*(1), 55.

Colman, A. M., Norris, C. E., & Preston, C. C. (1997). Comparing rating scales of different lengths: Equivalence of scores from 5-point and 7-point scales. *Psychological Reports, 80*(2), 355-362.

Ellis, R. J., & Coyle, D. J. (Eds.). (1994). *Politics, policy, and culture*. Westview Press.

Creswell, J. W. (2007). Five qualitative approaches to inquiry. *Qualitative inquiry and research design: Choosing among five approaches*, *2*, 53-80.

Creswell, J. W. (2013). Steps in conducting a scholarly mixed methods study.

Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist, 35*(2), 236-264.

Cunningham, R. M. (1956). Brand loyalty-what, where, how much. *Harvard Business Review*, 34(1), 116-128.

Daft, R. L., & Marcic, D. (2016). *Understanding management*: Nelson Education.

David Deakins, Mark Freel (1998) "Entrepreneurial learning and the growth process in SMEs", The Learning Organization, Vol. 5 Issue: 3, pp.144-155,)

De Mooij, M., & Hofstede, G. (2010). The Hofstede model: Applications to global branding and advertising strategy and research. *International Journal of Advertising*, *29*(1), 85-110.

Ding, S. (2011). Branding a rising China: An analysis of Beijing's national image management in the age of China's rise. *Journal of Asian and African Studies*, *46*(3), 293-306.

Duan, Y., Mullins, R., Hamblin, D., Stanek, S., Sroka, H., Machado, V., & Araujo, J. (2002). Addressing ICTs skill challenges in SMEs: insights from three country investigations. *Journal of European Industrial Training*, *26*(9), 430-441.

Du Plessis, A., Indavong, S., & Marriott, J. (2015). SME brand management: a lack of business skills, financial support and human resources.

Eckhardt, G. M., & Bengtsson, A. (2010). A brief history of branding in China. Journal of Macromarketing, 30(3), 210-221.

ElMassah, S., Michael, I., James, R., & Ghimpu, I. (2019). An assessment of the influence of personal branding on financing entrepreneurial ventures. *Heliyon*, *5*(2), e01164.

Farinha, L., & Bagchi-Sen, S. (2019). Following the Footprints of SME Competitiveness in a High-Technology Sector. In *Knowledge, Innovation and Sustainable Development in Organizations* (pp. 77-95). Springer, Cham.

Farquhar, P. H. (1989). Managing brand equity. *Marketing research*, *1*(3).

F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review, 26*(2), 106-121.

Finstad, K. (2010). Response interpolation and scale sensitivity: Evidence against 5-point scales. *Journal of Usability Studies, 5*(3), 104-110.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing research*, 382-388.

Foscht, T., Maloles III, C., Swoboda, B., Morschett, D., & Sinha, I. (2008). The impact of culture on brand perceptions: a six-nation study. *Journal of Product & Brand Management, 17*(3), 131-142.

Freiling, J. (2004). A Competence-based Theory of the Firm. *management revue*, 27-52.
Freiling, J., Gersch, M., & Goeke, C. (2008). On the path towards a competence-based theory of the firm. *Organization Studies*, *29*(8-9), 1143-1164.
Garson, G. (2016). Partial Least Squares: Regression and structural equation models. Statistical Associates Blue Book Series: Statistical Associates Publishing: Asheboro, USA.
Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika, 61*(1), 101-107.
Gelinas, R., & Bigras, Y. (2004). The characteristics and features of SMEs: favorable or unfavorable to logistics integration?. *Journal of Small Business Management*, *42*(3), 263-278.
Gereffi, G. (1999). A commodity chains framework for analyzing global industries. *Institute of Development Studies, 8*(12), 1-9.
Ghiselli, E. E. (1955). The measurement of occupational aptitude. *University of California Publications in Psychology*.
Ghobadian, A., & Gallear, D. N. (1996). Total quality management in SMEs. *Omega*, *24*(1), 83-106.
Ghodeswar, B. M. (2008). Building brand identity in competitive markets: a conceptual model. *Journal of product & brand management*, *17*(1), 4-12.
Gilmore, A., Gallagher, D., & Henry, S. (2007). E-marketing and SMEs: operational lessons for the future. *European Business Review*, *19*(3), 234-247.
Gliga, G., & Evers, N. (2010). Marketing challenges for high-tech SMEs. *Innovative Marketing*, *6*(3), 104-112.
Goi, C. L. (2009). A review of marketing mix: 4Ps or More?. *International journal of marketing studies*, *1*(1), 2.
Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational evaluation and policy analysis, 11*(3), 255-274.
Gruber, M. (2010). Exploring the origins of organizational paths: Empirical evidence from newly founded firms. *Journal of Management, 36*(5), 1143-1167.
Gui-long, Z., Yi, Z., Kai-hua, C., & Jiang, Y. (2017). The impact of R&D intensity on firm performance in an emerging market: Evidence from China's electronics manufacturing firms. *Asian Journal of Technology Innovation, 25*(1), 41-60.
Guest, L. (1964). Brand loyalty revisited: A twenty-year report. *Journal of Applied Psychology*, *48*(2), 93.
Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, *19*(2), 139-152.
Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications. *Long range planning, 45*(5-6), 320-340.
Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the academy of marketing science*, *40*(3), 414-433.
Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*: Sage Publications.
Hampf, A., & Lindberg-Repo, K. (2011). Branding: The past, present, and future: A study of the evolution and future of branding.
Harun, A., Wahid, N. A., Mohammad, O., & Ignatius, J. (2011). The Concept of Culture of Brand Origin (COBO) A New Paradigm in the Evaluation of Origin Effect. *International Journal of Academic Research in Business and Social Sciences*, *1*(3), 282.
Hatch, M. J., & Schultz, M. (2002). The dynamics of organizational identity. *Human relations, 55*(8), 989-1018.
Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing *New challenges to international marketing* (pp. 277-319): Emerald Group Publishing Limited.
Hinkin, T. R., Tracey, J. B., & Enz, C. A. (1997). Scale construction: Developing reliable and valid measurement instruments. *Journal of Hospitality & Tourism Research*, *21*(1), 100-120.
Hirvonen, S. (2016). From Outsourcing to Insourcing Brand Management: How Networking Helps SMEs to Become More Brand-Oriented? *Let's Get Engaged! Crossing the Threshold of Marketing's Engagement Era* (pp. 403-404): Springer.
Hoepfl, M. C. (1997). Choosing qualitative research: A primer for technology education researchers.
Hoffman, K., Parejo, M., Bessant, J., & Perren, L. (1998). Small firms, R&D, technology and innovation in the UK: a literature review. *Technovation, 18*(1), 39-55.
Hoeffler, S., & Keller, K. L. (2003). The marketing advantages of strong brands. *Journal of brand management*, *10*(6), 421-445.
Holland, T. (2017) What Is Branding? A Brief History https://www.skyword.com/contentstandard/creativity/branding-brief-history/
Hutchinson, K., Quinn, B., & Alexander, N. (2006). The role of management characteristics in the internationalisation of SMEs: Evidence from the UK retail sector. *Journal of small business and enterprise development*, *13*(4), 513-534.
Industry, S. C. o. C. a. (2016a). Overview of the leather goods industry Retrieved February,13, 2016, from http://www.scci.com.pk/reports Overview of the leather goods industry
Industry, S. C. o. C. a. (2016b). Report on Composite Sports Equipment Retrieved February,13, 2016, from http://www.scci.com.pk/reports Report on Composite Sports Equipment
Industry, S. C. o. C. a. (2016c). Report on SMEs Retrieved February13, 2016 from http://www.scci.com.pk/reportsReport on SMEs
Industry, S. C. o. C. a. (2016d). Report on Surgical Industry of Sialkot Retrieved February13, 2016, from http://www.scci.com.pk/reports Report on Surgical Industry of Sialkot.

Jeon, B. N., Han, K. S., & Lee, M. J. (2006). Determining factors for the adoption of e-business: the case of SMEs in Korea. *Applied Economics*, *38*(16), 1905-1916.
Johnson, G. (2016). *Exploring strategy: text and cases*: Pearson Education.
Jones, M., & Jain, R. (2002). Technology transfer for SMEs: challenges and barriers. *International Journal of Technology Transfer and Commercialisation*, *1*(1-2), 146-162.
Kamal, E. M., & Flanagan, R. (2014). Key Characteristics of Rural Construction SMEs. *Journal of Construction in Developing Countries, 19*(2).
Kala, Devkant & Chaubey, Dhani. (2016). Country-of-Origin Effect and Consumers' Buying Behaviour: An evidence from Indian Market. Management Convergence. 7. 47-59.
Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of marketing*, *57*(1), 1-22.
Keller, K.L. 2001. Building customer-based brand equity: A blueprint for creating strong brands. Marketing Management July/August: 15– 19.
Keller, K. L., Sternthal, B., & Tybout, A. (2002). Three questions you need to ask about your brand. *Harvard business review*, *80*(9), 80-89.
Keller, K. L. (2009). Building strong brands in a modern marketing communications environment. *Journal of marketing communications*, *15*(2-3), 139-155.
Keller, K. L. (2010). The new branding imperatives. *Cambridge, MA: Marketing Science Institute*.
Keller, K. L. (2013). Brand equity and integrated communication. In *Integrated Communication* (pp. 113-142). Psychology Press.
Keller, K. L. (2014). Designing and implementing brand architecture strategies. *Journal of Brand Management*, *21*(9), 702-715.
Keller, K. L., & Brexendorf, T. O. (2017). Measuring brand equity. *Handbuch Markenführung*, 1-32.
Kennedy, B., & Wright, A. (2016). Micro & Small Enterprises in Ireland: A Brand Management Perspective. *Business and Economic Research, 6*(1), 381-402.
Khalique, M., Isa, A. H. B. M., Shaari, N., Abdul, J., & Ageel, A. (2011). Challenges faced by the small and medium enterprises (SMEs) in Malaysia: An intellectual capital perspective. *International Journal of current research*, *3*(6), 398.
Khalique, M., Isa, A. H. B. M., Shaari, N., & Abdul, J. (2011). Challenges for Pakistani SMEs in a knowledge-based economy.
Khurrum S. Bhutta, M., Rana, A. I., & Asad, U. (2008). Owner characteristics and health of SMEs in Pakistan. *Journal of Small Business and Enterprise Development*, *15*(1), 130-149.
Kotler, P., & Armstrong, G. (2013). Principles of Marketing (16th Global Edition): Harlow: Pearson.
Kotler, P., & Zaltman, G. (1971). Social marketing: an approach to planned social change. The Journal of Marketing, 3-12.
Kraemer-Eis, H., Botsari, A., Gvetadze, S., Lang, F., & Torfs, W. (2017). European Small Business Finance Outlook: December 2017: EIF Working Paper.
Kumar, S., & Phrommathed, P. (2005). *Research methodology*: Springer.
Lampadarios, E. (2016). Critical challenges for SMEs in the UK chemical distribution industry. *Journal of Business Chemistry*, *13*(1), 17-32.
Lazer, W. (1973). Marketing's Changing Social Relationships. Social Marketing, Homewood (III.), 12-25.
Lee, K., Song, J., & Kwak, J. (2015). An exploratory study on the transition from OEM to OBM: Case studies of SMEs in Korea. *Industry and Innovation, 22*(5), 423-442.
Lee, S., Park, G., Yoon, B., & Park, J. (2010). Open innovation in SMEs—An intermediated network model. *Research policy*, *39*(2), 290-300.
Leone, R. P., Rao, V. R., Keller, K. L., Luo, A. M., McAlister, L., & Srivastava, R. (2006). Linking brand equity to customer equity. *Journal of service research*, *9*(2), 125-138.
Levy, S. J. (1999). Symbols for sale. reprinted in: Brands. Consumers, Symbols & Research, 203-212.
Liebowitz, S. J., & Margolis, S. E. (1995). Path dependence, lock-in, and history. *JL Econ. & Org.*, *11*, 205.
Liu, F.-H., Liu, H.-Y., & Lin, T.-L. (2008). The competence and constraints of brand building for contract manufacturers. *Journal of Brand Management, 15*(6), 412-432.
Lloyd-Reason, L., & Mughan, T. (2002). Strategies for internationalisation within SMEs: the key role of the owner-manager. *Journal of small business and enterprise development*, *9*(2), 120-129.
Lukács, E. (2005). The economic role of SMEs in world economy, especially in Europe. *European integration studies, 4*(1), 3-12.
Martineau, P. (1958). The personality of the retail store.
Mather, C. (2005). The growth challenges of small and medium enterprises (SMEs) in South Africa's food processing complex. *Development Southern Africa*, *22*(5), 607-622.
Meyer, K. (2018). Exploring marketing activities to strengthen brand equity within an SME.
Messeghem, K. (2003). Strategic entrepreneurship and managerial activities in SMEs. *International Small Business Journal*, *21*(2), 197-212.
Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological review, 63*(2), 81.
Mitchell, R., Hutchinson, K., Quinn, B., & Gilmore, A. (2015). A framework for SME retail branding. *Journal of Marketing Management, 31*(17-18), 1818-1850.
Moore, K., & Reid, S. (2008). The birth of brand: 4000 years of branding. Business History, 50(4), 419-432.
Morgan, D. L. (1998). Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative health research, 8*(3), 362-376.
Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and

quantitative methods. *Journal of mixed methods research, 1*(1), 48-76.
Morrow, S. L. (2007). Qualitative research in counseling psychology: Conceptual foundations. *The Counseling Psychologist, 35*(2), 209-235.
Morse, J. M. (1994). Designing funded qualitative research.
Nadvi, K. (1999). Collective efficiency and collective failure: the response of the Sialkot surgical instrument cluster to global quality pressures. *World development, 27*(9), 1605-1626.
Nandan, S. (2005). An exploration of the brand identity–brand image linkage: A communications perspective. *Journal of brand management, 12*(4), 264-278.
Newby, R., Watson, J., & Woodliff, D. (2003). SME survey methodology: Response rates, data quality, and cost effectiveness. *Entrepreneurship Theory and Practice, 28*(2), 163-172.
Nyström, A. G., Törnroos, J. Å., Koporcic, N., & Ivanova-Gongne, M. (2018). Summary: Branding in the B2B Context and Future Challenges. In *Developing Insights on Branding in the B2B Context: Case Studies from Business Practice* (pp. 219-229). Emerald Publishing Limited.
Ocloo, C. E., Akaba, S., & Worwui-Brown, D. K. (2014). Globalization and competitiveness: Challenges of small and medium enterprises (SMEs) in Accra, Ghana. *International Journal of Business and Social Science*, *5*(4).
Odoom, R. (2016). Brand-building efforts in high and low performing small and medium-sized enterprises (SMEs). *Journal of Small Business and Enterprise Development, 23*(4), 1229-1246.
Odoom, R., Narteh, B., & Boateng, R. (2017). Branding in small- and medium-sized enterprises (SMEs) Current issues and research avenues. *Qualitative market research: an international Journal, 20*(1), 68-89.
Odoom, R., & Mensah, P. (2019). Brand orientation and brand performance in SMEs: The moderating effects of social media and innovation capabilities. *Management Research Review*, *42*(1), 155-171.
Pansiri, J., & Temtime, Z. T. (2008). Assessing managerial skills in SMEs for capacity building. *Journal of management development*, *27*(2), 251-260.
Paul, J., Parthasarathy, S., & Gupta, P. (2017). Exporting challenges of SMEs: A review and future research agenda. *Journal of world business*, *52*(3), 327-342.
Perez-Sanchez, D., Barton, J. R., & Bower, D. (2003). Implementing environmental management in SMEs. *Corporate Social Responsibility and Environmental Management*, *10*(2), 67-77.
Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic management journal*, *14*(3), 179-191.
Peterson, R. A., & Jolibert, A. J. (1995). A meta-analysis of country-of-origin effects. *Journal of International business studies*, *26*(4), 883-900.
Philip, M. (2011). Factors affecting business success of small & medium enterprises (SMEs). *Amity Global Business Review*, *6*(1), 118-136.
Qi, Yanxia & Mensah, Yaw. (2011). The Influence of National Culture on Government Budgeting Practices: An International Analysis. SSRN Electronic Journal. 10.2139/ssrn.1913421.
Rahman, H. (2013). Open innovation: Opportunities and challenges for SMEs. In *Small and Medium Enterprises: Concepts, Methodologies, Tools, and Applications* (pp. 1521-1534). IGI Global.
Raki, S., & Shakur, M. M. A. (2018). Brand Orientation in Small and Medium Enterprises (SMEs) from Malaysian Government Perspective. *International Journal of Academic Research in Business and Social Sciences*, *8*(7), 377-391.
Renton, M., Daellenbach, U., Davenport, S., & Richard, J. (2015). Small but sophisticated: Entrepreneurial marketing and sme approaches to brand management. *Journal of Research in Marketing and Entrepreneurship*, *17*(2), 149-164.
Renton, M., & Richard, J. E (2019). Exploring brand governance in SMEs: does socialisation provide a means to value creation?. *Journal of Brand Management*, 1-12.
Ringle, C. M., Da Silva, D., & Bido, D. d. S. (2015). Structural equation modeling with the SmartPLS.
Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). Editor's Comments: A Critical Look at the Use of PLS-SEM in" MIS Quarterly". *MIS quarterly*, iii-xiv.
Robson, C. (2011). Real world research: A resource for users of social research methods in applied settings 3rd edition: West Sussex: John Wiley & Sons.
Sandhu, M. R. S. (2010). *Transformation of Traditional Industrial Cluster into Innovative Cluster: A Case Study of Surgical Instruments Forging Units of Daska, Sialkot, Pakistan.* (MS in Entrepreneurship and SME Management), GC UNIVERSITY LAHORE
Sandhu, M. R. S., & Zaheer, M. (2014). Interdependence of Value Chain Links: A Tale of Three Cities. *IBA Business Review, 9*(1).
Sandhu, M. R. S., Zaheer, M., Sadiq, M. F., & Feroze, A. (2011). Transforming traditional industrial cluster into innovative cluster: A case of Surgical Instruments Forging Industry of Daska, Punjab, Pakistan. *Interdisciplinary journal of contemporary research in business, 3*(3), 1355-1382.
Saunders, M. N. (2011). *Research methods for business students, 5/e*: Pearson Education India.
Saungweme, P., Naicker, V., & Chuma, W. (2010). Relationship marketing: Strategic and tactical challenges for SMEs.
Savlovschi, L. I., & Robu, N. R. (2011). The role of SMEs in modern economy. *Economia, Seria Management, 14*(1), 277-281.
SBP. (2016). PRs-SMEs. Retrieved July 07, 2016, from http://www.sbp.org.pk/publications/prudential/PRs-SMEs.pdf
Schmitz, H. (2005). *Value chain analysis for policy-makers and practitioners*: International Labour Organization.
Schouten, J. W., & McAlexander, J. H. (1995). Subcultures of consumption: An ethnography of the new bikers. Journal of consumer research, 22(1), 43-61.
Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*: John Wiley & Sons.

Siddiquie, M. (2018). *Branding Strategies of Service Small and Medium-Sized Enterprise Owners* (Doctoral dissertation, Walden University).

Singh, R. K., Garg, S. K., & Deshmukh, S. G. (2008). Strategy development by SMEs for competitiveness: a review. *Benchmarking: An international journal*, *15*(5), 525-547.

Singh, R. K., Garg, S. K., & Deshmukh, S. G. (2009). The competitiveness of SMEs in a globalized economy: Observations from China and India. *Management research review*, *33*(1), 54-65.

SIMAP. (2018). Brief Introduction of Surgical Association and Surgical Sector of Pakistan. from http://www.simap.org.pk/aboutus.php

Smallbone, D., Leig, R., & North, D. (1995). The characteristics and strategies of high growth SMEs. *International Journal of Entrepreneurial Behavior & Research*, *1*(3), 44-62.)

SMEDA. (2018a). Retrieved May 07, 2018, from https://smeda.org/index.php?option=com_content&view=article&id=7:state-of-smes-in-pakistan&catid=15

SMEDA. (2018b). Retrieved May 07,, 2018, from https://smeda.org/index.php?option=com_content&view=article&id=7:state-of-smes-in-pakistan&catid=15

Smith, W. R. (1956). Product differentiation and market segmentation as alternative marketing strategies. Journal of marketing, 21(1), 3-8.

Sofaer, S. (1999). Qualitative methods: what are they and why use them? *Health services research*, *34*(5 Pt 2), 1101.

Spence, M., & Hamzaoui Essoussi, L. (2010). SME brand building and management: an exploratory study. *European Journal of Marketing*, *44*(7/8), 1037-1054.

Srivastava, R. K. (2011). Understanding brand identity confusion. *Marketing Intelligence & Planning*, *29*(4), 340-352.

Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. *Journal of the royal statistical society. Series B (Methodological)*, 111-147.

Sumaco, F. T., Imrie, B. C., & Hussain, K. (2014). The consequence of Malaysian national culture values on hotel branding. *Procedia-Social and Behavioral Sciences*, *144*, 91-101.

Symonds, P. M. (1924). On the Loss of Reliability in Ratings Due to Coarseness of the Scale. *Journal of Experimental Psychology*, *7*(6), 456.

Tashakkori, A., & Creswell, J. W. (2008). Mixed methodology across disciplines: Sage Publications Sage CA: Los Angeles, CA.

Tavares, V. M. (2015). Brand management in SMEs: conceptualization of differences and research agenda. *European Journal of Applied Business and Management*, *1*(1).

Teddlie, C., & Tashakkori, A. (2003). Major issues and controveries inthe use of mixed methods in the social and behvioral sciences. *Handbook of mixed methods in social & behavioral research*, 3-50.

Trout, J., & RieS, A. (1972). Positioning cuts through chaos in marketplace. Advertising Age, 43, 51-54.

Upshaw, L. B. (1995). Building brand identity: A strategy for success in a hostile marketplace (Vol. 1). University of Texas Press.

Van de Vrande, V., De Jong, J. P., Vanhaverbeke, W., & De Rochemont, M. (2009). Open innovation in SMEs: Trends, motives and management challenges. *Technovation*, *29*(6-7), 423-437.

Van Scheers, M. L. (2011). SMEs' marketing skills challenges in South Africa.

Walliman, N. (2005). *Your research project: a step-by-step guide for the first-time researcher*: Sage.

Webster, F. E., & Keller, K. L. (2004). A roadmap for branding in industrial markets. *Journal of Brand Management*, *11*(5), 388-402.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, *5*(2), 171-180.

Wickramansinghe, N., & Sharma, S. K. (2005). Key factors that hinder SMEs in succeeding in today's knowledge-based economy. *International Journal of Management and Enterprise Development*, *2*(2), 141-158.)

Winch, G. W., & Bianchi, C. (2006). Drivers and dynamic processes for SMEs going global. *Journal of Small Business and Enterprise Development*, *13*(1), 73-88.

Wonglimpiyarat, J. (2015). Challenges of SMEs innovation and entrepreneurial financing. *World Journal of Entrepreneurship, Management and Sustainable Development*, *11*(4), 295-311.

Yan, H.-d., Chiang, C., & Chien, C. S. (2014). From original equipment manufacturing to branding: entrepreneurship, strategic leadership, and Taiwan's firm transformation. *International Entrepreneurship and Management Journal*, *10*(1), 81-102.

Yankelovich, D. (1964). New criteria for market segmentation. Harvard Business Review, 42(2), 83-90.

Yieh, K., Yeh, C. H., Tseng, T. H., Wang, Y. S., & Wu, Y. T. (2018). An investigation of B-to-B brand value: evidence from manufacturing SMEs in Taiwan. *Journal of Business-to-Business Marketing*, *25*(2), 119-136.

Zhongqun, S. (2011). Road of strategic transformation for chinese OEM enterprises: Issues and countermeasures. *Science and Technology Management Research*, *1*, 10-13.

Annexure

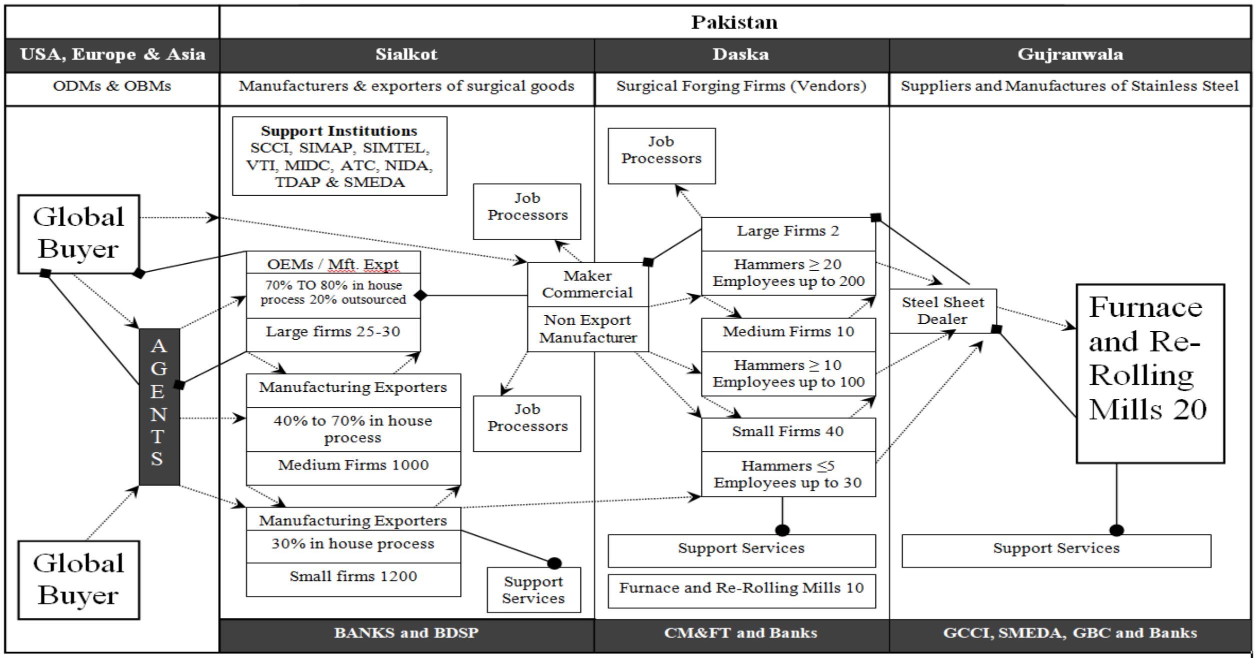

Figure 1: Value Chain of Surgical Industry of Pakistan (Sandhu, 2010)

Figure 2: *Path Coefficients & Beta Values*

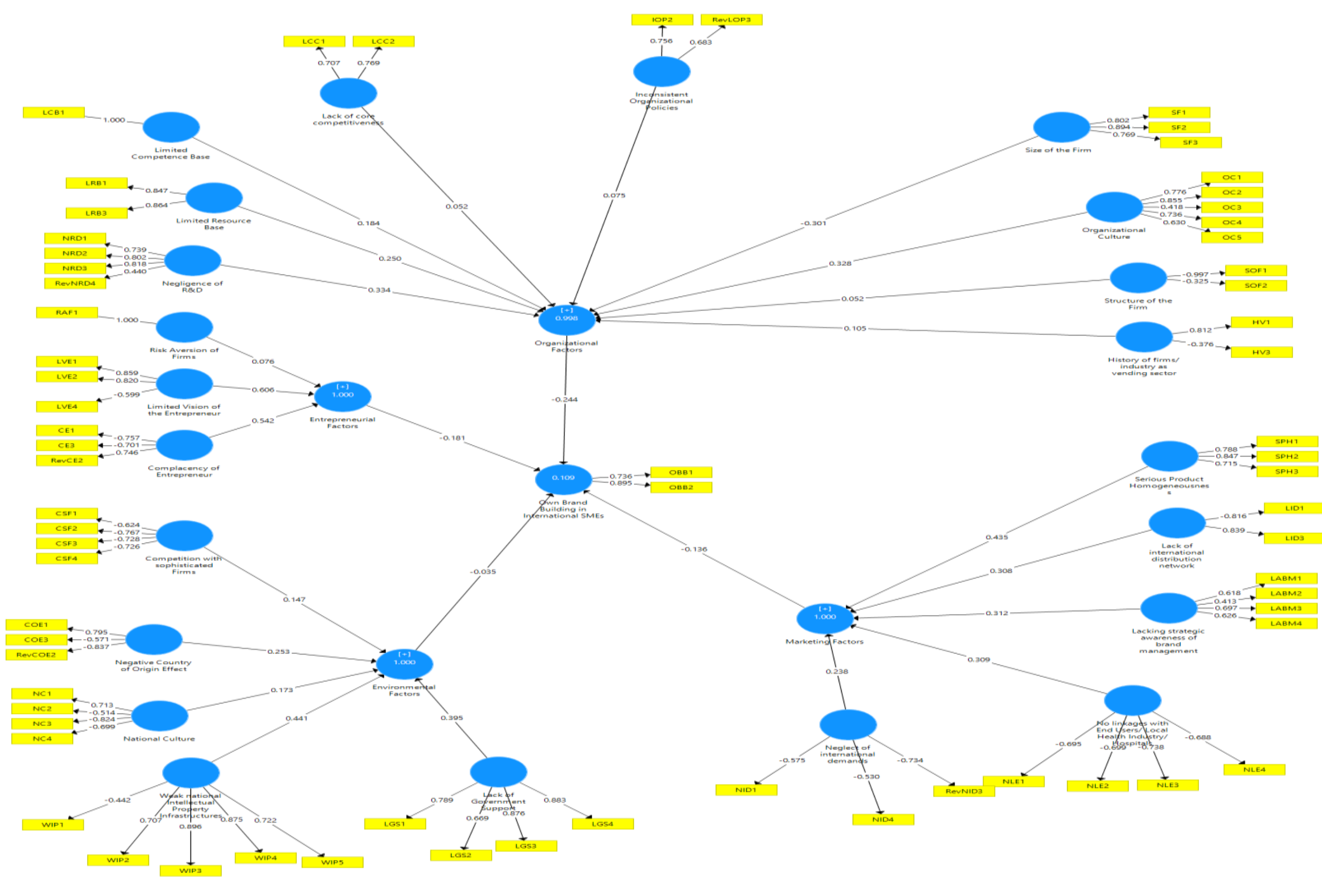

Table 3: Reliability & Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Competition with sophisticated Firms	0.706	0.695	0.805	0.509
Complacency of Entrepreneur	-0.111	0.585	0.250	0.539
Entrepreneurial Issues	0.281	0.738	0.145	0.256
Environmental Issues	0.717	0.864	0.435	0.251
History of firms/industry as a vending sector	0.465	-0.324	0.042	0.298
Inconsistent Organizational Policies	0.168	-0.040	0.377	0.329
Lack of Government Support	0.823	0.854	0.882	0.654
Lack of core competitiveness	0.168	0.171	0.704	0.545
Lack of international distribution network	-0.507	0.555	0.016	0.467
Lacking strategic awareness of brand management	0.351	0.342	0.555	0.275
Limited Competence Base	-0.059	0.400	0.297	0.367
Limited Resource Base	0.292	0.626	0.648	0.488
Limited Vision of the Entrepreneur	0.255	0.696	0.496	0.456
Marketing Issues	0.363	0.716	0.015	0.155
National Culture	0.220	0.581	0.460	0.485
Negative Country of Origin Effect	-0.361	0.645	0.219	0.553
Neglect of international demands	-0.120	0.220	0.465	0.306
Negligence of R&D	0.677	0.735	0.801	0.513
No linkages with End Users/ Local Health Industry/Hospitals	0.673	0.660	0.799	0.498
Organizational Culture	0.721	0.742	0.821	0.490
Organizational Issues	0.643	0.804	0.437	0.145
Own Brand Building in International SMEs	0.526	0.610	0.799	0.669
Risk Aversion of Firms	0.042	-0.612	0.188	0.327
Serious Product Homogeneousness	0.691	0.709	0.827	0.616
Size of the Firm	0.762	0.775	0.863	0.679
Structure of the Firm	0.429	0.517	0.667	0.427
Weak national Intellectual Property Infrastructures	0.589	0.826	0.775	0.557

Table 4: *Path Coefficients*

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Competition with sophisticated Firms -> Environmental Factors	0.147	0.115	1.279	0.201
Complacency of Entrepreneur -> Entrepreneurial Factors	0.542	0.046	11.863	0.000
Entrepreneurial Factors -> Own Brand Building in International SMEs	-0.181	0.124	1.455	0.146
Environmental Factors -> Own Brand Building in International SMEs	-0.035	0.184	0.189	0.850
History of firms/industry as vending sector -> Organizational Factors	0.105	0.078	1.347	0.178
Inconsistent Organizational Policies -> Organizational Factors	0.075	0.054	1.377	0.169
Lack of Government Support -> Environmental Factors	0.395	0.058	6.759	0.000
Lack of core competitiveness -> Organizational Factors	0.052	0.036	1.435	0.152
Lack of international distribution network -> Marketing Factors	0.308	0.070	4.390	0.000
Lacking strategic awareness of brand management -> Marketing Factors	0.312	0.075	4.165	0.000
Limited Competence Base -> Organizational Factors	0.184	0.081	2.280	0.023
Limited Resource Base -> Organizational Factors	0.250	0.074	3.390	0.001
Limited Vision of the Entrepreneur -> Entrepreneurial Factors	0.606	0.039	15.687	0.000
Marketing Factors -> Own Brand Building in International SMEs	-0.136	0.148	0.915	0.361
National Culture -> Environmental Factors	0.173	0.073	2.370	0.018
Negative Country of Origin Effect -> Environmental Factors	0.253	0.043	5.929	0.000
Neglect of international demands -> Marketing Factors	0.238	0.043	5.512	0.000
Negligence of R&D -> Organizational Factors	0.334	0.068	4.909	0.000
No linkages with End Users/ Local Health Industry/Hospitals -> Marketing Factors	0.309	0.132	2.336	0.020
Organizational Culture -> Organizational Factors	0.328	0.086	3.832	0.000
Organizational Factors -> Own Brand Building in International SMEs	-0.244	0.135	1.806	0.072
Risk Aversion of Firms -> Entrepreneurial Factors	0.076	0.083	0.910	0.363
Serious Product Homogeneousness -> Marketing Factors	0.435	0.208	2.088	0.037
Size of the Firm -> Organizational Factors	-0.301	0.226	1.329	0.184
Structure of the Firm -> Organizational Factors	0.052	0.087	0.599	0.549
Weak national Intellectual Property Infrastructures -> Environmental Factors	0.441	0.050	8.879	0.000