



Dissertation

Master in International Business

***Internal relations between parent headquarters-
subsidiaries of multinational companies***

Richard John

Leiria, *December of 2017*



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Dissertation/Report developed under the supervision of Doctor Cátia Fernandes Crespo, professor at the School of Technology and Management of the Polytechnic Institute of Leiria.

Leiria, *December of 2017*

Dedication *(optional)*

To my family and friends.

Acknowledgements (*optional*)

I am grateful to the God for the good health and wellbeing that were necessary to complete this Dissertation.

I would like to express my gratitude to my supervisor Cátia Fernandes Crespo for the useful comments, remarks and engagement through the learning process of this master thesis. Furthermore I would like to thank all other professors for their support on the way. Also, I like to thank the participants in my survey, who have willingly shared their precious time during the process of filling the questionarrie. Last but not the least I would like to thank my family, who have supported me throughout entire process, both by keeping me harmonious and helping me putting pieces together. I will be grateful forever for your love.

Resumo *(in Portuguese)*

Uma subsidiária é uma afiliada local de uma empresa multinacional, podendo estar situada num local distante da casa-mãe. Geralmente funciona como uma nova entidade no país alvo, com diretrizes funcionais da empresa-mãe. As subsidiárias podem recolher benefícios da empresa-mãe em termos de partilha de *know-how* tecnológico, segredos comerciais, conhecimento administrativo, marca comercial, etc. Por sua vez, elas funcionam como uma subunidade do valor global da empresa multinacional, fundamental para aumentar a competitividade da empresa-mãe. Consequentemente, o relacionamento entre as duas partes desempenha um papel crítico na obtenção de vantagem competitiva.

O objetivo principal do presente estudo consiste em examinar as diversas características no relacionamento entre a subsidiária e a casa-mãe, com vista a identificar fatores-chave para a partilha interna de conhecimento. Neste estudo, as relações internas entre a subsidiária e a casa-mãe da empresa multinacional foram examinadas tendo como base as teorias da *resource-based view* e da *organizational learning*, destacando como determinantes da partilha interna de conhecimento, a aprendizagem organizacional, as competências da subsidiária, a centralização, a formalização e a *network strength*. Posteriormente, foi avaliado o subsequente impacto da partilha interna de conhecimento na performance organizacional. A análise de regressão linear foi conduzida para testar as hipóteses. Os resultados evidenciam que a aprendizagem organizacional, as competências da subsidiária, a centralização, a formalização e a *network strength* influenciam a partilha interna de conhecimento, incrementando a performance organizacional.

Palavras-chave: competências da subsidiária, aprendizagem organizacional, centralização, formalização, *network strength*, partilha de conhecimento.

Abstract

The subsidiary is the local affiliate of a multinational company typically situated in a distant location from the headquarters. Usually it works as a whole new entity in the target country, with functioning directives from the parent company. The subsidiaries can benefit from the parent firm in terms of sharing of technological know-how, trade-secrets, administrative knowledge, commercial brand name, etc. In turn, they work as a value-adding subunit of the MNC, instrumental in increasing the competitiveness of the parent organization. Therefore, the relationship between the two parts plays a critical role in gaining competitive advantage.

The primary aim of the present study was to examine the various facets of association between headquarters and its subsidiary and to. In this study, the internal relations between any headquarters and its subsidiary in an MNC environment were examined based on resource based view, organizational learning, knowledge sharing, subsidiary competence, centralization, formalization, and network strength along with organizational performance.

Regression analysis was conducted to test the hypotheses. Our study demonstrates that the factors Organizational learning, Subsidiary competence, Centralization, Formalization, and Network strength influenced Knowledge sharing of the subsidiary, which further impacted on Organizational performance.

Keywords: *Subsidiary competence, Organizational learning, Centralization, Formalization, Network strength, Knowledge sharing.*

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List of acronyms

MNC – Multinational Company

OL – Organizational Learning

FDI – Foreign Direct Investment

RBV – Resource Based View

R&D – Research and Development

CSR – Corporate Social Responsibilities

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1. Introduction

The man who pursues happiness wisely will aim at the possession of a number of subsidiary interests in addition to those central ones upon which his life is built.

— Bertrand Russell, The Conquest of Happiness

The idea of globalization has led to a constant change in the business perspective of the organizations (Schotter & Beamish, 2011). It is critical for economic success, thereby forcing them to spread to different parts of the world.

Organizations can be delineated as “purposive entities designed by their creators to maximize wealth, income, or other objectives defined by the opportunities afforded by the institutional structure of the society” (North, 1990). Among the various organizations, MNC (multinational corporations) emerges as the leading actors in the market economy (Bakan & Yildirimci, 2015). They are the type of organizations where at least 20% of the total tangible assets are capitalized in foreign areas and the revenue generated from them is at least 35%. The MNC has been described as a group of geographically scattered, goal diverse organizations involved in generating and selling services and goods in more than one nation that generally comprises of its parent-headquarters situated in the home country and the different national/foreign subsidiaries, characteristically with a greater degree of strategic communications among the units (Bhardwaj & Hossain, 2001; Ghoshal & Bartlett, 1990). A recent definition by Koveshnikov, Ehrnrooth, and Vaara (2017) describes MNC as complex organizational forms that span multiple geographic, cultural, functional, and linguistic boundaries and bring together diverse organizational actors with their own, and often conflicting, interests, aspirations and identities.

The spread of the parent organization begins possibly through the opening of branches or through strategic alliances, affiliations, associations, franchises, and also formation of subsidiaries in the target countries. This is mostly done either by investing or partnering with a pre-existing company or by creating locally in the host country (Bakan & Yildirimci, 2015).

A subsidiary has been delineated as a local affiliate of a MNC situated in a distant country of which the parent company owns 51% of the local company (Bouquet & Birkinshaw, 2008). This works as a whole new entity in the target country following the mandates from the headquarters and is formed due to FDI (Foreign Direct Investment) by starting a joint-venture/greenfield operations or by associating with foreign affiliates (Delios & Beamish, 2004). Usually, subsidiaries can profit from the parent firm in terms of sharing of technological know-how, trade-secrets, administrative knowledge, commercial brand name, etc. (Bakan & Yildirimci, 2015). They perform as a value-adding subunit of the MNC, instrumental in increasing the competitiveness of the parent organization (Birkinshaw & Hood, 1998) and they may partially or totally share the revenues with the parent company (Gedikli, 2011). There are certain companies commonly called as supranational companies which primarily gain advantages in production, competition, distribution at a global level (Özyakışır, 2014). These firms have existed post Second World War permeating to USA, Western Europe, Japan and South Korea.

1.1. MNC-subsidary relations

The subsidiaries bring drastic transformations in the business atmosphere primarily due to fierce changes in the developing markets, globalization and advancement in technology (Schotter & Beamish, 2011), thereby requiring the parent company to continuously make strategic and structural adjustments in the working policies (Mudambi & Swift, 2011; Pahl & Roth, 1993). This increases intra-organizational complexities in coordination, communications and other organizational adjustment processes which become the cause of conflict between the parent headquarters and their subsidiaries (Schotter & Beamish, 2011). This may critically affect the individual and overall performance of both the company and its subsidiary. Therefore, it calls for the development of a better understanding and coordination among them (Pahl & Roth, 1993). According to Schotter and Beamish (2011), the conflict is normally caused by the organizing and managing procedures in foreign countries. The manager in the subsidiary has added responsibility of encountering the local market demands and dealing with the employees and authority along with the directives given by the headquarters on the subsidiary.

The relations between the subsidiary and the headquarters can get hampered because of the conflict arising between the differences in the working environment. This kind of conflict

is called as the inter unit conflict as this exists among the two defined social units (Pahl & Roth, 1993). It can be defined as the process where one side will or is frustrating the concerned other (Thomas, 1976). Conflicts were characterized into two types: Dysfunctional and Functional by Menon, Bhardwaj and Howell (1996). The dysfunctional one had an adverse impact on the firm's performance, whereas, the functional conflict involves a high degree of fact-based conflict orientation and improved most of the organizational characteristics like interdepartmental interconnectedness, formalization, low communication obstacles, and team spirit. Conversely, it was observed that centralization and high communication barriers most likely aggravate dysfunctional conflict.

Conflicts were also categorized into three discrete convoluted classes: task conflict, relationship conflict and process conflict (Jehn & Mannix, 2001). All three may occur concurrently at different strengths. The task conflict arises due to the dissimilarities in opinions and viewpoints about a joint undertaking or a group (Amason & Sapienza, 1997). Jehn and Mannix (2001) posit that it is oriented on facts and includes personal enthusiasm and animated exchanges, without any unfavorable feeling. The conflict in process comprises of divergence in specific process of any task undertaken (Jehn et al., 1999). It mostly involves a matter of contention in areas like task responsibility, allocation of resource and task implementation. On the contrary, conflict in relationship primarily represents the interpersonal differences along with the emotional units, including tension and friction (Jehn & Mannix, 2001). It has an unhealthy impact at a personal level like prejudice within various employees and may cause multiple negative emotions.

The ability for any intergroup conflict is determined by the incompatibility in the level of objectives, any difference in the level of dependence of activity, any crusade for achieving autonomy, and sharing resources. Along with this, ambiguity in jurisdiction, spatial, temporal and physical obstacles in communication, unawareness, conflict of interest and diversity in the backgrounds of the employees on both sides have been recognized as influential factors (Pahl & Roth, 1993). Conflicts also get activated by triggers such as preferences in customer and market choices, difference in strategies in terms of global and local competition, dissimilarity in regulation of governance in parent and subsidiary countries, lopsided strategies, irregularities within the dynamics of the global and local industries, increased administrative self-centeredness, apathy towards the firm's interests, the psycho-social features of managers

stationed at parent organizations and its subsidiaries, increasing level of autonomy of the subsidiary, etc. (Schotter & Beamish, 2011).

Thus, the parent subsidiary relationship mostly falls under the category of dysfunctional conflicts due to the presence of unfavorable management practices, below par organizational structure and disorganized strategies because of disparities in the working atmospheres (Birkinshaw et al., 2000; Pahl & Roth, 1993).

The leading factors included the structure of MNC, control over subsidiary by parent headquarters, the local market responsiveness, global alliances, and joint venture management (Schotter & Beamish, 2011).

These conflicts can be managed by three dominant subsidiary strategies proposed by Pahl and Roth (1993). They include local responsiveness, global integration, and multi-focal strategies.

In local responsiveness strategy, each subsidiary manages the primary business activities, thereby enjoying a high amount of autonomy. These operate where the market is highly sensitive to local disparities to defend themselves from any global competition. The success of the MNC resides in its capability of handling any business overseas by evaluating and choosing the right countries for competition and acquire a one-time knowledge/skill transfer tactfully.

In global integration strategy, the competition is not local but spans across national boundaries and influences its standing in a different country. Therefore, the organization consolidates the activities of the subsidiary to attain a sustainable competitive advantage. This can be achieved through: a) competitive gains in terms of individual economies of the countries, b) Location benefits due to differences in cost at cheaper places and c) position of market power such as the monopoly of the organization or a higher market share.

Multifocal strategy basically involves the mix of the above-mentioned strategies, local responsiveness and global integration. It involves the integration and coordination of value chain activities with other units to have any sustainable advantage. Applying this strategy sometimes becomes difficult because of the local claims with respect to process, product or any service. Therefore, the integration occurs in varying levels.

The study by Pahl and Roth (1993) investigated the association between the headquarters and the foreign subsidiaries. Hypotheses regarding the strategies followed by each MNC, any intergroup conflict, their style of conflict management, integration systems, and the overall efficiency of this relationship showed no significant differences in the intergroup conflict faced by subsidiaries following the above mentioned international strategies. However, there was a clear decrease in the effectiveness of the headquarters-subsidiary relationship. Moreover, it was also observed that most of the previous studies after Pahl and Roth (1993) lacked the aspect of integration or development in their studies and mostly gave a one-sided view on the aspect of association (Schotter & Beamish, 2011). Recent study by Koveshnikov et al. (2017) reported the headquarter (HQ)-subsidiary relations as a multilevel discursive struggle between key managers in the MNC.

1.2. The managerial role in MNC-subsidiary relationship

In spite of all the challenges, the subsidiary managers are quite skilled in using the limited resources to push their subsidiaries' initiatives to HQ (Birkinshaw & Ridderstråle, 1999). They play an active role in the management of both internal as well external corporate interfaces, degree of autonomy and individual initiatives taken by the subsidiary. This has further implications on the overall development of strategy in an organization (Birkinshaw, 1998). Internal contacts, their various capabilities and skills, their reputation and external relationships can comprise these sources of power (Kovshnikov et al., 2017).

Thus, they can be designated as the key players from the subsidiary point of view (Schotter & Beamish, 2011). Two types of power with respect to the manager mainly contribute in handling the association between HQ and subsidiary, viz., information power and expert power (Schotter & Beamish, 2011). Expert power produces reliability with crucial sections of the headquarters in terms of organizational interactions, service, and products along with the coordination procedures within the MNCs. Preference for the power of information is higher as it creates a level of resource dependency. It also restricts the access of the headquarters to the environments of the external host nation. These environments may include institutions, suppliers and customers.

It becomes equally imperative for the headquarters to actively control their socialization in terms of corporate behavior and demarcate achieving goals within the various MNC

subsidiaries (Schotter & Beamish, 2011). The participation of managers in devising and formulating any strategy has been observed to enhance organizational performance (Floyd & Wooldridge, 1997). However, typically the managers in the subsidiary have bad impressions of being inherently opportunistic, who are only concerned with their egocentric interests by attaining autonomy and power for their career prospects or other selfish motives (Taplin, 2006). In some cases, the cause of conflict was established to be the asymmetry in information from the parent headquarter managers and managers present at the foreign subsidiaries (Kristensen & Zeitlin, 2001; O'Donnell, 2000).

1.3. The role of organization in MNC subsidiary relationship

Resources are one of the major dependencies of the subsidiary on the parent headquarters. The next step involves the sharing of the knowledge along with organizational learning and critical resources (Crespo, Griffith & Lages, 2014). Organizations that lack such vital resources are likely to get associated with other organizations for obtaining them. Thus, subsidiaries make attempts to regulate their dependence by reducing their requirements. Alternatively, they may also increase the level of necessity of other organizations on them (Schotter & Beamish, 2011). A bargaining power is generated when the local knowledge enhances the host environment while dealing with the headquarters (Osborne & Rubinstein, 1990). Power is gained by the subsidiary through mutual dependence and dependence imbalance (Mudambi et al., 2014). The role of a subsidiary is dynamic, however, is jointly negotiated between HQ and subsidiary managers (Koveshnikov et al., 2017). In case of an overestimation, it serves as a higher level of control of the subsidiary by the parent MNC (Birkinshaw et al., 2000). This leads to decreased levels of cooperation between them.

1.4. Competitive sustainable advantage

The whole idea of having a subsidiary from the perspective of the organization is to gain an overall competitive sustainable advantage over its competitors. A firm's ability to continuously re-join asset stocks and apply them to new market opportunities determines its sustainable competitiveness (Dierickx & Cool, 1989). The capability for an MNC to increase and sustain an advantage is also contingent on its skills in integrating, coordinating, and transferring resources across national markets (Roth, Schweiger & Morrison, 1991). The chief source of competitive advantage has shifted from the efficiency in production capability to the

operation and leverage of intellectual capital and organizational knowledge (Crespo et al., 2014; Fey & Furu, 2008). It also involves the flow of capabilities and knowledge from extraneous subsidiaries to the headquarters and other corporate entities. Therefore, effective integration of knowledge drives the competitive sustainable advantage. Knowledge acquired from various national markets needs to be transmitted for efficacious integration, especially when the MNC is perceived as a network of knowledge (Lee, 2010; Lee, Chen, Kim & Johnson, 2008).

1.5. Scope of investigation

The general purpose of the study was to understand the internal relations between any headquarter and its subsidiary in an MNC environment. The scope of the study refers to the parameters under which the study was conducted. Based on the background given in this study, the intricacies of any relationship can only be understood using the following factors important for gaining sustainable competitive advantage. Therefore, the scope of the study comprises of parameters such as resources, organizational learning, subsidiary competence, knowledge sharing, centralization, formalization, national cultural distance and network strength, knowledge sharing and organizational performance on the associations of the HQ-subsidiary in India, with particular reference to subsidiary part located in Bangalore. These factors are linked to each other as the functioning of any subsidiary involves the acquiring of resources and organizational learning. The next step involves the efficient sharing and transfer of knowledge. Although the existence of an MNC is attributed to its capability of efficiently transferring knowledge, it does not entail that knowledge is regularly transferred in MNCs. Gupta and Govindarajan (2000) report that MNCs encounter significant issues in such aspects. Therefore, it is crucial to comprehend the methods of transferring knowledge within MNCs. The impact of centralization on the subsidiary (if any, or to what extent) and the autonomy aspect of the subsidiary also may decide the type of relationship. Along with this, the effect of formalization and its influence on the performance of the subsidiary was studied. The study also covers the cultural issues being faced by the employees at the host country along with any changes in policy and procedures due to the parent company. Finally, the support of networking between the subsidiary and HQ was considered as the factor joining all other factors.

The multitude of findings will enable us to understand any points of impediments in maintaining a successful relationship between the HQ and its subsidiary. This study will develop a model depicting the factors involved and their relationships.

1.6. Contribution proposed

The understanding of this relationship and the possible factors influencing them needs an intensive study as this association of the parent MNC with its subsidiary is extremely challenging, highly complex and involves interrelated multiple factors. While studying the prior studies on relationship within the MNC and the subsidiaries, the following research gaps were identified. Schotter and Beamish (2011) reasoned this gap in the literature to the complexities of this particular relationship between parent and subsidiary. It is rather difficult to recognize the different levels of conflicts and its outcome without any knowledge on the process. The gaps in research have been listed below:

- Even though, the resource based view has been studied extensively, there are limited studies pertaining to the aspect of internal relation within an organization with respect to the concept of RBV. This study has been conducted in India as India has a long history of MNC culture. However, studies done in this area with respect to the Indian context are extremely scarce (The study of Thite, Budhwar and Wilkinson (2014) is an exception).
- Most of the studies on organizational learning had focused in terms of strategy renewal. There has been a narrow conceptualization of organizational learning in terms of applying it to achieving competitive advantage to the company and to strengthen the relations within the parent-subsidiary units. Therefore, a need has been felt for an extensive study on organizational learning in terms of the functioning of a subsidiary in the Indian scenario.
- There has been a limited success in knowledge management in terms of transferring and sharing of knowledge among the subsidiaries and their parent company (Taylor & Osland, 2015). A limited scope of studies was also observed in the field of internal communication. There have been no recent studies on knowledge sharing between organizations in Indian scenario excluding Jain and Moreno (2015).

- Most of the studies relating to centralization and formalization have involved these as a means of controlling the subsidiary. However, it has been difficult to gauge whether centralization is required and at which levels to maximize the performance of the subsidiary without losing its identity locally and globally.
- There is a paucity of research on organizations, which explore the national culture distance observed in organizations present in India and its relevance in the India context, where there is already a vast cultural diversity. The criteria for the choice of ownership mode of the parent company and the extent of its management on the subsidiary without hindering the interrelationships need an emphasis. Network strength is one of the primary requirements for any MNC to grow and increase its global presence and there are limited studies pertaining to network strength among the MNC and its impact on firm performance.
- There is a deficit in the systematic study of the relationship shared by the parent HQ and its subsidiary.

The chief aim of the present study is to examine the various facets of association between them and to understand the areas of lacunae for attaining competitive advantage. This study makes a contribution in identifying the areas of conflict between the parent HQ and the subsidiary.

1.7. Main research question

This study mainly focuses on understanding the internal relation between the MNC headquarter and subsidiary through identification of the presence of any inter unit conflict between them and the factors that may be critical for balancing these relations.

1.8. The research aim

To understand the relationship between the headquarters and the subsidiaries in a MNC, the following objectives were studied:

1. To identify the influence of organizational learning within the subsidiary and the headquarters of the MNC.
2. To understand the level of competence of the organizations due to resource sharing.

3. To comprehend the process of organizational control power on the subsidiary through the process of centralization and formalization by the headquarters of the MNC.
4. To identify the role of network strength in strengthening the subsidiary.
5. To understand the sharing on the subsidiary in terms of resources and knowledge

1.9. Dissertation structure

Chapter 1 presents the study background that deals with the relations of an MNC with its subsidiaries. Further, the scope of investigation, the significance of the research, research questions and study objectives are deliberated.

Chapter 2 presents the review of literature on the various factors governing the internal relations between the parent headquarters and its subsidiary. This chapter critically discusses the factors affecting this linkage between the headquarters and its subsidiaries. These factors include resource based view, organizational learning, knowledge sharing, subsidiary competence, centralization, formalization, and network strength along with organizational performance.

Chapter 3 explains the conceptual model developed through analyzing variables in the complex relationship between the HQ and the subsidiary branch and the formulation of hypothesis to be tested.

Chapter 4 describes the methodology, data collection method and the research approach. Data was collected from various employees working in many subsidiaries of MNCs located in Bangalore, India. Exploratory analysis was applied on the research design and research object. Quantitative methodologies using a questionnaire measured the variables involved. This was further used to test the hypotheses.

Chapter 5 represents the expected outcome and discussion of the reasons behind them. Data were interpreted in terms of statistical tools and presented graphically.

Chapter 6 summarized the conclusions that could be drawn from the study. The major limitations of this study were identified and a guidance map for future research was also suggested in this chapter.

2. Literature Review

The study of the internal relations within an organization has eight outlooks. They have been elaborated in the subsequent sections, namely, i) Resource based view, ii) Organizational learning, iii) Subsidiary competence, iv) Knowledge sharing, v) Centralization, vi) Formalization, vii) Network strength and viii) Organizational performance.

2.1. Resource based view

The resource based view (RBV) can be described as a fundamental part of strategic management of an organization to understand the internal physiognomy and its connection to its performance to obtain sustained competitive advantages (Davis, 2017). These strategies capitalize on the organization's inner strengths to act on the circumstantial opportunities, while counter balance the external threats evading the existing weaknesses (Barney, 1991).

The term resource comprises the entire assets, competencies, structural procedures, organizational features, facts and knowledge of the organization. These contribute towards increasing the organizational efficacy and productivity. These capital resources can be divided into three groups (Barney, 1991):

- a. Physical: this includes the organization's instruments, equipment, technology, topographical location and its approach to the required raw materials.
- b. Human: This contains the manpower part of the organization along with their organizational vision and their understanding towards developing it through various tools such as trainings, experience, etc.
- c. Organizational: This contains the type of structure used for formal reporting, planning, regulating, and synchronizing systems and associations within and between the organizations.

For achieving a sustained competitive advantage, it is essential that the resources are valuable; rare; inimitable or non-substitutable (commonly described as VRIN) (Barney, 1991; Newbert, 2008). It also involves a correct mix of the resources (physical, human or organizational) essential for implementation. The control of these resources has been found to be extremely intricate and mutually dependent on each other. The complexity also increases

with the changing social perspective on relationships within the organization. The resource based view emphasizes that the ability of attaining and handling the resources is dependent on time and space. Therefore, any valuable and rare resource obtained early will act as a competitive advantage for the organization. Moreover, using RBV, Terziovski (2010) validated the similarity between the innovation strategies of small and medium enterprises with that of the large organization. RBV has been following an “inside-out” approach to competitive strategy formulation (Davis, 2017). Here, the internal capabilities are initially considered and then applied to the outside problems.

Barney et al. (2001) evaluated the influence of RBV on aspects of international business, marketing, entrepreneurship, economics and human resource management. It is observed to be highly significant in the fast-developing field of strategic human resource management (SHRM) (Wright et al., 2001). Any organization’s success is strategically dependent on the available manpower and their competencies (Davis, 2017). The entrepreneurial capability of organizing resources, possessing knowledge and being aware of such capabilities was collectively considered as resources in their own right. Along with this, the entrepreneur fills in as a field expert. Marketing can be beneficial to RBV as the interaction with customers can help in identifying the rare resources.

The RBV perspective has been frequently implemented in the international business area. The problems of foreignness can be reduced by bridging the gap between the various resources and international diversification. The domestic companies can form alliances with the foreign companies so as to get a competitive edge over their local competitors (Barney et al., 2001).

Resources that are made available to MNCs are largely influenced by the dissemination of their subsidiaries in different locations (Andersson, Forsgren & Holm, 2002; Ghoshal & Bartlett, 1990; Håkanson, & Nobel, 2001). As established by various authors, this organizational structure creates a situation where the subunits are exposed to both local and intra-organizational resources, either as knowledge or physical benefits such as goods and services (Andersson et al., 2002; Foss & Pedersen, 2002). By targeting resident market situations, individual subsidiaries are able to gain a competitive advantage, which in turn is beneficial for the entire company. Since local market conditions will vary, it can be expected that the benefits for the affiliates will vary accordingly (Mauri & Sambharya, 2001). As early

as 1967, Lawrence and Lorsch had highlighted the heterogeneous nature of an MNC's intrinsic structure, noting that internal communication would change to reflect the variations in the external market networks.

Earlier research has highlighted the potential heightened productivity that MNCs experience when they tap into these assorted resources, particularly knowledge (Inkpen & Tsang, 2005). In one case study, Orlikowski described a sharing of soft skills between personnel from different units (Orlikowski, 2002). This study highlights the potential transfer of employees as another form of resource sharing. Additionally, resource allocating can be considered in terms of transferring social capital (Adler & Kwon, 2002; Andersson, et al., 2002). Exchange of these resources requires the development of an internal network for communication, or an intra-organizational network, to transfer information both between the subsidiaries and the headquarters, and between the subsidiaries themselves (Gupta & Govindarajan, 2000; Schleimer & Riege, 2009). In fact, in 2000, Gupta and Govindarajan argued that it was this very network of communication that contributed to the success of MNCs. Thus, investigating the RBV more thoroughly can facilitate a better understanding of relations between the subunits and the company head office.

2.2. Organizational learning

Organizational learning, along with its resources, is one of the components of sustained competitive advantage for global survival (Crossan et al., 1999; Taylor & Osland, 2003). According to Argote and Miron-Spektor (2011), it has been delineated as the variation in the organization's awareness that happens as either its own function or experience of other organizations. Organizational learning can occur by any of the two methods, namely, learning from its own employees or by acquiring a new employee with knowledge unknown to the organization (Grant, 1996). It can also occur through vicarious learning, learning obtained through the understandings of other organization (Argote, 2015). This extends from acquiring external knowledge to knowledge internalization and then applying to the employees (Yu, Dong, Shen & Khalifa, 2013). This is followed by assimilation of knowledge in the organization's social system. This gain of knowledge happens over a period (Argote & Miron-Spektor, 2011; Grant, 1996). The social system involves communication among the members in the organization with their outside atmosphere and within the organization. Thus,

organizational learning is largely attained through internalization and applying the overall knowledge (Yu et al., 2013). Organizations have specific and specialized resources assigned for gaining organizational learning and knowledge acquisition such as research positions, research and development (R&D) departments, official training programs, contracting experts (employees with specialized knowledge), and the growth and use of technology enabled learning support devices (Kane & Alavi, 2007). These experts simplify the process of making any locally attained knowledge and make it universally applicable to the organization. A study by Erkelens, Hooff, Huysman and Vlaar (2015), empirically investigates the role of these experts on growing organizational learning through knowledge pollination. This process involves un-embedding the knowledge obtained from its branch or subsidiary and re-embedding it in the parent organization. Jain and Moreno (2015) identified the factors of organizational learning and their positive impact on the knowledge management practices and organizational performance in India. Achievement orientation, reward and recognition, autonomy, performance management, teamwork and collaboration were the factors listed by them.

The introduction of any new form of knowledge leads to disruption in the organizational inactivity and brings about a positive change in the technological and administrative processes of the organizations. Moreover, it is used to capitalize the prevailing knowledge, increase resource competence and knowledge for newer potentials. It has also been found to be instrumental in shaping any organization's innovativeness (Yu et al., 2013). Competent learning also involves recurrent evaluation of the learning process (Lin & Wu, 2014), thereby making learning a part of the routine process (Grant, 1996). Prior knowledge of the problem helps in circumventing any repetition of errors. The problems faced by the organizations (acts as knowledge) are stored in the form of organizational memory for future references (Argote, 2015). However, there is a certain amount of decay or depreciation of knowledge over time in every organization (Argote & Miron-Spektor, 2011).

Contemporary learning organizations have three major aspects, namely, supportive learning atmosphere, definitive learning methods and practices, and leadership behavior (Dodgson, Gann & Phillips, 2014). In a supportive learning atmosphere the members identify contrasting concepts, get exposed to the risks and explore unfamiliar situations. Definitive learning methods include proper processes for creating, assembling, analyzing and distributing

information. Along with this, experimentation with novel methods is conducted for identifying and solving problems. The leadership component solely depends upon the leader's ability to admit other perspectives. New technological insights from top managers can improve the level of learning within the organization.

Organizational learning has been found to overcome some of the shortcomings that have been identified in organizational strategy research. These limitations include extreme analytical orientation, bias in higher management, absence of learning and disregard of factors that help in strategy making (Crossan & Berdrow, 2003). A 4I framework comprising the four processes of organizational learning, namely, intuition, interpretation, integration and institutionalization, was formulated by Crossan, Lane and White (1999). The 4I framework was executed at the individual, group and organizational levels. This was followed by the development of another framework by Argote and Miron-Spektor (2011) on knowledge, task performance experience, potential, organizational context along with environmental context. Cohen and Sproll (1991) described it as a more balanced method within the area of choice and decision making. However, organizational learning later appeared more as a trial and error / random event (Crossan & Berdrow, 2003).

The conversion of organizational learning into knowledge occurs in three steps (Argote & Miron-Spektor, 2011). This includes generating, retaining and transferring knowledge. The generation of knowledge happens through the elements of employees, instruments and tasks. They also act as storehouses of knowledge. Transferring of knowledge mainly occurs through the movement of employees, tools or task sequences. This has been discussed in detail in the next section. The various ways of measuring organizational learning has been also been described by Argote and Miron-Spektor (2011).

Hotho, Lyles and Easter-Smith (2015) summarize the variation in studies done on organizational learning and its influence on the development of global strategies. It was reported that organizations have their own way of learning theories which evolve at a faster rate. Organizational learning was considered a part of dynamic capabilities in the performance of the organization (Lin & Wu, 2014). This was found to have the most vital mediating effect on the firms studied.

Organizational learning can be categorized into subdomains, such as aspects of knowledge, learning methods, and amplitude of social capacity (Hotho et al., 2015). Global management teams, dyads/triads (HQ and subsidiaries), sharing of intra organizational innovation, knowledge of HQs and their alliances and types of knowledge (internal, external, forgotten, explicit, tacit) were reviewed. There was a lot diversity and complexity in the learning methods. Knowledge gaps, experiential learning, knowledge transfer and sourcing, absorptive capacity, alternate forms of learning, exploration and exploitation were the key antecedents of the study. Among exploration and exploitation, exploratory learning has a better prospective in terms of benefit and budgets. Therefore, exploitation gets replaced with unidentified explorations. However, there should be an optimum balance between exploitation and exploration dynamics within the organization (Dodgson et al., 2013; Kane & Alavi, 2007).

Studies by Lee et al. (2008) emphasize the significance of knowledge and its enhancement by co-creating it with the headquarters and the subsidiary. Forming a strategic alliance with another company can lead to the adoption of novel capabilities via organizational learning (Mowery, Oxley and Silverman, 1996). Alliances of US companies with Japanese associates resulted in increased learning opportunity among them. Multiple exposures to various countries also act a trigger to develop unique competencies (Berry, 2014). Other forms of learning can also occur from rare events, acquisitions or contracts (Argote & Miron-Spektor, 2011). Wei, Yi and Guo (2014) observed the flexibility of organizational learning in both exploratory and interactive aspects leads to enhancement in product innovation. Along with that, changes in organizational architecture and technology such as the addition of computer-aided systems and the formation of virtual worlds encourage organizational learning. These systems can provide instant communication, linking space and time, generating organizational memory and providing a platform for discussing and integrating solutions (Dodgson et al., 2014; Kane & Alavi, 2007). However, these systems can also act as a double-sided sword depending upon the type of mechanism used (Kane & Alavi, 2007).

Organizational learning gets diminished (Dodgson et al., 2014; Taylor & Osland, 2011) because of miscommunication, ignorance and shared misunderstanding in multidisciplinary groups at different geographical locations and variant methods of working in different organizations. No archiving of the attained knowledge also leads to loss of learning which eventually leads to the absence of knowledge sharing (Taylor & Osland, 2011). Standardized

working outmoded processes and ideas also cause hindrance to the learning process (Dodgson et al., 2014).

2.3. Subsidiary competence

The inherent competency of the subsidiary is primarily responsible for the improvement of the functioning of the subsidiary itself, and also the headquarters directly (Andersson et al., 2002). Competence gets created through multifaceted, distinct interactions between the subsidiary and its local business partners which are majorly helpful in escalating the performance of the subsidiary itself (Andersson et al., 2002). Moreover, subsidiaries can accrue considerable knowledge that is possibly valuable to the parent company and also its peer subsidiaries (Miao, Choe and Song, 2011). Development of knowledge is context-specific, or may even be relation-specific. This specificity is positively correlated with the ability of the subsidiary to absorb knowledge (Lane and Lubatkin, 1998). Thus, it can be deduced that subsidiaries with relatively strong resources, competences and capabilities are more able to strengthen the positive influence that knowledge outflows have for the improvement of an MNC's performance.

Mudambi et al., (2014) gives us an outline about how subsidiaries attain power in MNC. They also suggested that superior subsidiary competencies enable the organizations to overcome with threats and opportunities in the external environment. Subsidiary competence development has a secondary implication on the organizational performance (Andersson et al., 2002). Chang, Gong and Peng (2012) highlighted through their model that subsidiary performance finally depended on the successful translation of competency via transfer of knowledge. In the study by Andersson et al., (2002), however, there was an absence of impact of sales along with purchases on the organizational performance of the subsidiary.

2.4. Knowledge sharing: the social learning approach

Along with learning processes, knowledge behaves as one of the primary resources in terms of organizational strategy (Grant, 1996; Lee et al., 2008) and innovation (Noorderhaven & Harzing, 2009). The organizations are visualized as the centers of knowledge (Fey & Furu, 2008) where the headquarters and the subsidiaries are partners in co-creating knowledge (Lee et al., 2008).

According to Davenport & Prusak (1998), knowledge has been specified as a fluid mix of expert insight, contextual information, values, and framed experience that renders a model for assessing and integrating new information and experience.

Depending on content, knowledge can be of two types: declarative and procedural (Noorderhaven & Harzing, 2009). The declarative form, usually includes documents/ reports (from subsidiaries to HQ), archives, organizational routine orders (from HQ to subsidiaries); tightly linked to the organization, while the procedural form involves methods, practices, and standards (Fey & Furu, 2008; Noorderhaven & Harzing, 2009). The content of knowledge to be shared also decides the speed of knowledge sharing. Thus, upstream activities have been observed to be relatively simple to document, thereby making it easily shareable.

The ability of sharing, collaborating and coordinating this knowledge among the parent organizations and its subsidiaries/ alliances/ associates/ branches forms the central foundation for attaining competitive advantage over other organizations (Fey & Furu, 2008; Lee et al., 2008). The sharing and transferring of knowledge can be put under knowledge management (Kane & Alavi, 2007). This provides information about global and local competitors and the consumers (Lee et al., 2008). Thus, companies encourage knowledge sharing as knowledge is considered an intangible asset, wherein it does not lose its own value even when it has been used. There are three basic ways by which there can transfer of knowledge within cross-borders (Martin & Salomon, 2003): a) Two or more subsidiaries and alliances, supply on-going resources and participate in the management of the organization (equity joint ventures also included here). This includes both inbound and outbound knowledge flows (Fey & Furu, 2008). b) Licenses the recipient to use this knowledge through contracts. This helps the knowledge to be protected typically through secrecy and intellectual property rights such as patents, copyrights and trademarks. c) The subsidiaries may show complete autonomy, behave independently of the source organization. These also act as the basic modes of organizational entry in any foreign location.

The synthesis of knowledge may be localized to one geographical area, whereas sharing the knowledge leads to dynamic and beneficial use at other locations (Noorderhaven & Harzing, 2009). The flow of knowledge and its eventual integration depends on the direction and source

of knowledge created (Noorderhavan & Harzing, 2009). Along with this, the subsidiary and HQ countries also play an essential role (Fey & Furu, 2008).

There are two approaches on knowledge sharing viz., Sender-receiver and the Social learning model (Noorderhavan & Harzing, 2009). In the sender-receiver model, the basic components of transfer comprise of source, conduit, message, recipient and context (Noorderhavan & Harzing, 2009). It is assumed here that the sender is rich in knowledge. Therefore, the flow of knowledge is from the highest level to lower level. Knowledge sharing and transfer depends upon the source transfer capacity (Martin & Salomon, 2003). It has been defined as the organizational capability of articulating the benefits of knowledge, evaluating the requirements and capacities of the potential recipient, and transmitting knowledge to various sites. This gives us a fair idea about the strengths and weaknesses of both the source and the recipient. The amount of knowledge transfer depends upon the recipient transfer capacity. This can be delineated as the ability of a recipient in imbibing and retaining knowledge from a willing origin. This has also been described as the absorbing power of the recipient (Noorderhavan & Harzing, 2009).

With regard to the Social learning approach, knowledge is socially generated through discussions and interactions within the employees (Noorderhavan & Harzing, 2009). Here, the flow of knowledge is only by intensive interactions and strong cooperation obtained through sharing the activity jointly. The movement of employees from one firm to another can also be a mechanism for transferring knowledge (Argote & Miron-Spektor, 2011). Asymmetry in information is found among the managers of HQ and their subsidiaries (Fey & Furu, 2008). This is mainly due to the difference in opinion regarding knowledge attainment. The local requirements will be well understood by the subsidiary managers, whereas, the HQ managers are more knowledgeable about the organizational goals, interdependencies and the necessities of the whole organization. Two problems have been recognized by Fey and Furu (2008) in terms of knowledge sharing: the subsidiary managers may keep the information to themselves, without sharing it or they might not be able to receive new forms of knowledge due to the non-acceptability of the new knowledge. Additional difficulty in transferring may occur due to the embeddedness of knowledge in the local context (Erkelens et al., 2015). This can be overcome by providing motivation in the form of incentives (Gupta & Govindrajana, 2000). Fey and Furu

(2008) studied the effect of giving some form of compensation to the subsidiary top managers for sharing knowledge among 164 foreign-owned subsidiaries in Finland and China.

The factors that stimulate the flow of knowledge within MNCs are the intensity of social interaction, work flow amalgamation, subsidiary competences and independence of the subsidiary (Noorderhavan & Harzing, 2009).

Social interaction involves communication of resources through tours, visits, international committee, temporary squads and task forces, inter-subsidary trainings, technical meetings and conferences (Noorderhavan & Harzing, 2009). Informal associations and cross-national groups channelize the flow of knowledge in a more positive way and reduce any negative notions (Persson, 2006; Schulz, 2003). The knowledge attained within its branches and subsidiaries, is of intrinsic nature. The tacit knowledge cannot be 'captured', 'converted' or 'transferred', but merely gets demonstrated (Tsoukas, 2003). The tacit knowledge may be a strong origin of attaining competitiveness (Grant, 1996) as it works as a shield against any imitation by the competitors. Therefore, it has been observed to affect the level of knowledge transmission at new sites (Martin & Salomon, 2003). The flow of tacit information depends upon the amount of trust between both the parties where the knowledge transfer happens (Lee et al., 2008; Noorderhavan & Harzing, 2009). The tacit knowledge is more secure since it is difficult to consider from outside (Grant, 1996). The only disadvantage lies in the increase in expenses for the company at the time of entry at a foreign location (Martin & Salomon, 2003). Social interaction acts as an effective approach for transfer of knowledge. Nevertheless, the mere presence of social interaction does not ensure the sharing of knowledge (Martin & Salomon, 2003). To have the knowledge that is beneficial and usable, it needs to be removed from the local source, then translated, interpreted and modified according to the receiver's view (Noorderhavan & Harzing, 2009). The next step is the integration of knowledge into the workflow, which is one of the essential components for efficient sharing of knowledge (Persson, 2006; Schulz, 2003). This integration, connected through operational methods, can have an inspirational impact on both sides (Schulz, 2003). However, there is a possibility of flow of material in the form of completed or even semi-finished products without obtaining any knowledge within the subsidiaries (Noorderhavan & Harzing, 2009). Competencies and skills of the subsidiary lead to the gradation of knowledge within its flow. Therefore, the stronger units with higher capabilities act as the senders of knowledge due to their increased presence

of abilities, whereas the weaker units are knowledge receivers. Also, the age, size, type of subsidiary and its functioning also controls the flow of knowledge. This can be attained by a variety of organizational and technological skills (Martin & Salmon, 2003). Finally, the autonomy of the subsidiary has been observed to have a positive (Foss & Pedersen, 2002) as well as negative (Gates & Egelhoff, 1986; Gupta & Govindrajana, 2000) influence on learning and knowledge flow from headquarters to subsidiary (Noorderhavan & Harzing, 2009). It depends mostly on the level of autonomy of the subsidiary. Autonomy is helpful when the sharing of local knowledge is involved (Foss & Pedersen, 2002). Too much of independence shows the lack of hierarchical coordination, and consequently there may be more hindrance in sharing and transferring knowledge (Gates & Egelhoff, 1986). The transfer of knowledge is crucial as it necessitates the transfer of processes in totality, thereby making it more expensive, time taking and prone to any casualty (Martin & Salomon, 2003). The expenditures increase because of the continuing need for monitoring and controlling routine processes and changing the knowledge in case of any misuse. This has a drastic impact on the performance of the organization. The need of knowledge sharing between the HQ and its subsidiaries and between peer subsidiaries is dependent upon the area of processes where that new knowledge can supplement the existing processes and making them advantageous. Martin and Salomon (2003) in their study also reported about the insights of knowledge exploitation done by organizations and the factors governing the strategies involving knowledge sharing.

2.5. Centralization

One of the modes of coordination and control of activities by organizations involves centralization (Nobel & Birkinshaw, 1998). It has been regarded as the cheapest form of administrative mechanism (Ghoshal & Nohria, 1989), contradicted by Hoenen and Kostova (2014). It does not require any resources for institutionalization. Nevertheless, it requires managerial resources for decision making and continuous monitoring (Ghoshal & Nohria, 1989). It is opposite to the concept of subsidiary autonomy (Gupta & Govindrajana, 2000). With respect to MNCs, centralization may be defined as the governance mechanism/ level in the organization which approved any decision before it could be implemented (Gates & Egelhoff, 1986; Ghoshal & Nohria, 1989). Thus, it is an organizational characteristic where the headquarters management influences its operational units in terms of decision making, thereby shifting the position of power in favor of the headquarters (Ghoshal & Nohria, 1989).

Gates and Egelhoff (1986) after conducting of a literature review reported that centralization is a vital factor responsible for organizational effectiveness and adaptiveness. This view was later supported by many of the scholars (Egelhoff, 2010; Meyer, Mudambi and Narula, 2011; Nobel & Birkinshaw, 1998). This may be due to the increased knowledge flow from the HQ to the subsidiary (Egelhoff, 2010; Gupta & Govindrajana, 2000) or through executing standardized decisions (Egelhoff, 2010). This has been described as a comparatively exclusive capability of the hierarchy. Besides, decentralization can be responsible for many risks and threats (Hoenen & Kostova, 2015). Indian companies were believed to be more centralized in decision making (Thite, et al., 2014).

However, centralization is negatively related to size, complexity in terms of product diversity, product modifications, foreign acquisitions and environmental change (product change and competitive climate change) (Gates & Egelhoff, 1986). Three levels of control (within the subsidiary, within the headquarters and above the level of division, within the headquarters) for three types of decisions (marketing, manufacturing and financing) were studied (Gates & Egelhoff, 1986).

Jamali (2010) studied about the Corporate Social Responsibilities CSR of MNC subsidiaries in developing countries and listed certain advantages and disadvantages associated with the centralization of the organization. It was observed that the centralized global strategies were proactive, effective and integrated. However, there was a lack of local response/ownership. There has been a difficulty in monitoring and controlling subsidiaries due to high physical and cultural distance (Jamali, 2010).

Centralization was observed to be disadvantageous to some organizations (Thite et al., 2014), where there is high interdependency of subsidiary on HQ (Ghoshal & Nohria, 1998). The capability to respond also diminishes with centralization. Furthermore, it can increase the possibility of dysfunctional conflicts (Ghoshal & Nohria, 1989; Menon et al., 1996), thereby decreasing the overall performance of the organization. It can cause loss of sensitivity towards local difficulties (Egelhoff, 2010) and may impair the valuable knowledge resources of the subsidiary (Meyer et al., 2011). Moreover, application of decentralization to the management made the subsidiary free of any coercive pressures (Gupta & Govindrajana, 2000). The subsidiary was more responsible towards immediate interests of the resources in the

organization (Dörrenbächer & Gammelgaard, 2006). Schotter and Beamish (2011), in their studies on understanding the conflicting relationship of the HQ and subsidiaries, labeled the subsidiaries according to the negotiation tactics. Those subsidiaries that followed the network centrality of the parent organization were given more importance in terms of focus and growth strategies. However, subsidiaries which were autonomous were categorized as rebels and demonstrated low levels of resource dependency towards headquarters. There was a third category, where the subsidiaries were almost imperceptible by their respective headquarters, thereby showing the least amount of HQ-subsidiary conflict.

In a study about the control and communication patterns of MNCs, Nobel and Birkinshaw (1998) reported a variation in levels of centralization within units. The local adaptors displayed the minimum level of centralization, followed by moderate levels by international creators, and the highly predominant in international adaptors.

2.6. Formalization

The regulation of the operational activities by the organization can be done through a variety of attributes (Nobel & Birkinshaw, 1998). Formalization is one of the preferred forms of control amongst centralization, formalization and socialization (Ambos & Schlegelmilch, 2007; Ghoshal & Nohria, 1989). It can be defined as the organizational control characteristic that deals with routine use of systematic rules and procedures and resource allocation (Ghoshal & Nohria, 1989; Nobel & Birkinshaw, 1998). The subsidiaries usually achieve the comprehensive goals by following the detailed directives from the headquarters (Kostova, Nell & Hoenen, 2016). It is measured using the existing standardized reports and technical standards obtained from the various units within the MNC (Nobel & Birkinshaw, 1998).

Nobel and Birkinshaw (1998) demonstrated the presence of varying levels of all three characteristics at the same time between the parent-subsidiary relationships. The local adaptors had the highest amount of formalization, the international adaptors had moderate while international creators were low on formalization. This was both contradictory and similar to the studies by Ambos and Schlegelmilch (2007) where there was a positive relationship between formalization and international adaptors, but a negative relationship with international creators. An MNC following global and transnational strategies must follow a high degree of formalization to have a tight control over the foreign subsidiaries (Donaldson & Joffe, 2014).

Formalization is directly related to the size of the organization and inversely related to the need for innovation. It also has an impact on the organizational designs where the R&D department shows a low formalization as it should perform a high level of uncertain tasks. In the meantime, the administrative aspects of the organization need to maintain a considerable high degree of formalization to fit the large size of the organization.

Among the advantages, formalization has been found to be a cheaper administrative control tool (Ghoshal & Nohria, 1989). It is highly predictable and extremely efficient with a low requirement of any administrative resources and minimum maintenance. In a conflict-prone situation, it acts as a bridge for fruitful exchange of knowledge. It has been observed that a high level of interdependency of subsidiary over HQ shifts the control mode towards formalization (Ambos & Schlegelmilch, 2007; Ghoshal & Nohria, 1989). It delivers a structured context to exchange for both the firms. It has a positive correlation with environmental complexity and local levels of resource (Ghoshal & Nohria, 1989). Formalization has been reported to be a part of the functional conflict behavior, which enhances the performance of the organization (Schotter & Beamish, 2011). It can lead to a reduction in power for both parent headquarters and the subsidiary, thereby reducing any potential source of conflict between the HQ and its subsidiary (Ghoshal & Nohria, 1989). As a part of strategic mandate, growing levels of resource power will cause lower levels of formalization in the organization (Ambos & Schlegelmilch, 2007). Formalization has the ability to generate a framework for coordinated decision-making; however, it hinders the rapid adaptation to the changing environment (Ghoshal & Nohria, 1989). It reduces the flexibility within the organizational operations. Everyone is obligated to follow the same prescribed process, thereby achieving operational clarity. Each of these rules/instructions comes out in the form of a policy from the headquarters. An agreement is attained through continuous monitoring and enforcement from headquarters. This leads to enhanced communication between the parent firm and its subsidiary at a vertical level via peer-to-peer interaction. However, the horizontal knowledge outflows in an MNC can be negatively influenced by formalization, restricting the internal flexibility (Crespo et al., 2014).

2.7. Network strength

The emerging need to understand the spread and success of a MNC lies in developing its network strength (Bartlett & Ghoshal, 1989; Ghoshal & Bartlett, 1990). The success of the

MNC necessitates a support framework that can help in overcoming their obligations with respect to the associated unfamiliarity of the host-subsiary (Lee, 2010).

Network strength can be defined as the extent of connections among the subsidiaries in the same network of MNC (Lee et al., 2008). The headquarters, the subsidiaries and the extent of interactive associations formed among different corporate units are covered by the MNC network (Lee, 2010).

Any foreign organization can use network strength as a crucial source for obtaining a varied set of information and knowledge embedded in its network of MNC (Lee, 2010). Thus, it acts as critical firm resource that holds the key to the MNC network, thereby responsible for product innovation via knowledge transfer. This was supported by the studies conducted by Lee et al. (2008) and Lee (2010). Network strength adds to the organizational competitiveness by forming a relational capital, which gets embedded inside the network (Lee et al., 2008). Robust associations among network members are depicted by the high level of network strength (Nahapiet & Ghoshal, 1998). The close connection between various units brings about a synergistic exchange of ideas and forces the sharing of knowledge with each other (Lee et al., 2008). The higher the number of subsidiaries, the higher is the network strength increasing the possibility of higher knowledge transfers among the firm (Lee, 2010). This may improve leading capabilities by acquiring novel knowledge (Gupta & Govindrajana, 2000). The gap created by the cultural distance can be compensated with the build-up of a strong network within the organization (Erkelens et al., 2015).

The direct and indirect effects of MNC network strength were studied using a conceptual model developed by Lee (2010). This model considers the interdependency provided by the support of the network strength and strategic dimensions, such as market responsiveness and product innovation, influenced by market and technological turbulences, in the process of improving the organizational performance (Figure 1). Therefore, it was suggested that the market trends and its responses along with the performance of the organization can be moderated by the network strength.

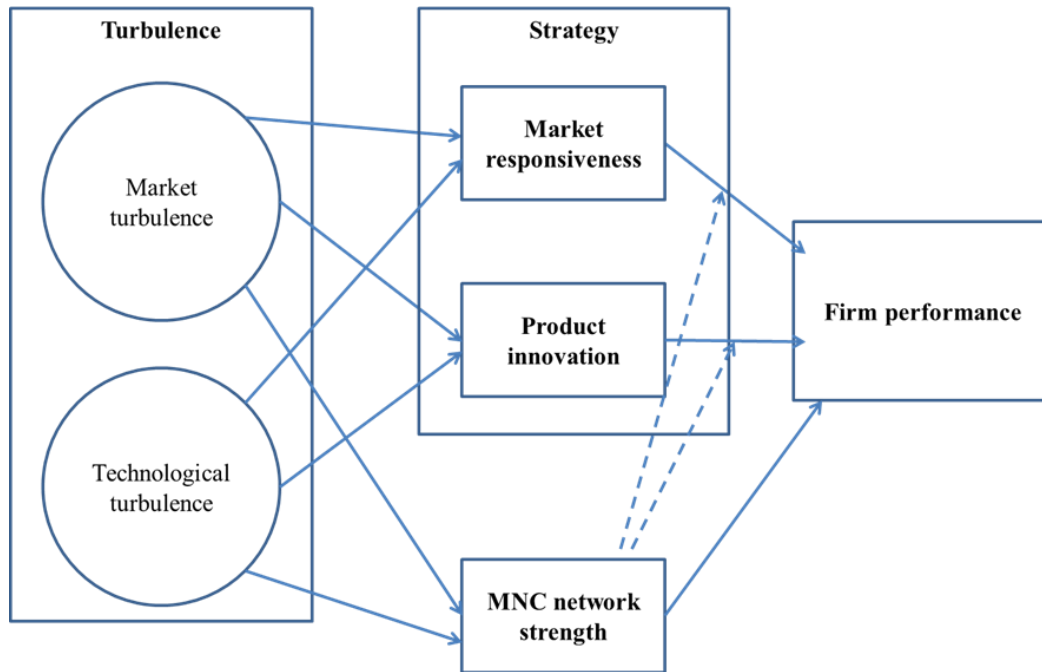


Figure 1- Network model (adapted from Lee, 2010)

The establishment of the network occurs through the learning of network (Erkelens et al., 2015). It can be inferred that whenever the network strength within the MNC units rises, a focal foreign firm will most likely acquire a broader array of knowledge from other MNC entities (Lee et al. 2008). This network is developed by assembling, preserving, and socially interacting with a multiple fellow associate having pertinent experience and expertise (Erkelens et al., 2015). The headquarters holds an influential part in the distribution of resources, developing ways of coordinating and communication (Chung, 2014). Studies by Chung (2014) also report about the role of reverse transfer in improving the performance of the organization through internal networks. This is mostly a consequence of the conscious decision of the headquarters, rather than any spontaneous event.

The review of the network strength among MNC is limited (Lee et al., 2008; Lee, 2010); therefore, it can be concluded that the role of network strength of the organization with respect to internal relations is not clearly understood and needs to be studied in detail.

2.8. Organizational performance

Organizational performance primarily measures the functional productivity of the company in terms of business outcomes. The factors affecting the efficiency of an organization

include, man power, dynamic abilities (Enriquez-De-La-O, 2015), training (Aragón, Jiménez & Valle, 2014), innovation (Yu et al., 2013) and division of labor (Mudambi et al., 2014). Training is a part of organizational learning and has more impact on the employees, productivity, growth of sales and the quality of work (Aragón et al., 2014). Incentives also drive performances (Fey & Furu, 2008). There is a continuous requirement to constantly innovate by integrating resources and engaging in knowledge for enhanced performance (Yu et al., 2013). The performance of the organizations may vary from subsidiary to subsidiary depending upon the functional specialization chosen by them (Mudambi et al., 2014). It was also suggested that the embeddedness of business and technology of the subsidiaries forms the bedrock of organizational development. To achieve superior organizational performance, an integration of knowledge and labor is required (Lepak, Takeuchi & Snell, 2001).

Moreover, the performance of the subsidiary can be improved by sending resources of parent organizations to the location of the subsidiary. Therefore, recruiting expatriates for the culturally distant subsidiaries applies inherent cultural control over the subsidiaries to achieve common organizational goals and values (Hotho et al., 2015).

Organizational performance is affected by organizational learning. This has also been supported by various researchers (Aragón et al., 2014; Argote, 2015; Bititci et al., 2011; Jain & Moreno, 2015; Lopez, Peon & Ordas, 2004; Yu et al., 2013). In Indian context, Jain & Moreno (2015) reported the organizational performance in a public sector company, working in the field of power generation. Jain and Moreno (2015) and Moyo, Chan and Waveren (2015) also observed that collaboration and team learning also played an important part in organizational performance. There may be a possibility of difficulty in overall team learning as these teams working as projects may have a short life span (Moyo et al., 2015). Centralization was a prime determinant of organizational effectiveness (Boseman and Jones, 1974; Egelhoff, 2010), adaptiveness (Blau & Schoenherr, 1971) superior performance (Meyer et al., 2011). However, Young and Tavares (2004) and Luo and Bu (2017) reported in their review that there was a positive impact of autonomy or decentralization on the overall organizational performance.

2.9. Summary

An extensive literature review was carried out to identify the already existing work related to internal associations between an MNC's head office and the subsidiaries. To facilitate easier

comprehension and search, the review was divided into six key sections, each of which represented a different viewpoint. The RBV examined how exchanging resources gave the MNC a competitive advantage. Subsequent sections on organizational learning and knowledge sharing further examined factors contributing to this advantage. Studies on management and authority decisions in the form of centralization were also reviewed, with the advantages and disadvantages of this form of governance weighed. Research related to the use of formalization for effective organizational practice was collected, followed by investigations into the different networking systems seen in MNCs. Based on the information that was collected, the review was valuable in determining the direction that the current study would take, as there was limited information regarding these factors with respect to an Indian context and correlation between the different outlooks.

3. The conceptual model of the study and Research hypotheses

This chapter develops the conceptual model of our study, which explores the main topic of research, i.e., internal relations between a subsidiary and its parent headquarters using the hypotheses built by different outlooks derived from the Literature Review. These factors include: organizational learning, centralization, formalization, network strength, subsidiary competence, and knowledge sharing and transfer. The conceptual model has been represented in Figure 2 (see below).

Among these, knowledge sharing and transfer was considered as the dependent variable in our study and the rest as independent variables. A dependent variable is the variable which the researcher has primarily studied and wants to predict its outcome using other variables (independent variables) (Schumacker, 2014). In contrast, the independent variable can be described as the variable that the researcher uses to understand the changes in the dependent variable (Schumacker, 2014) as it is correlated with the dependent variable (Lavrakas, 2008). Usually, the independent variable is denoted by an x and the dependent variable by y, with the implication that "x causes y" or, in the case of non-causal co-variation, "x is related to y."

In summary, hypothesis testing involves the identification of the causal factors for increased knowledge sharing. The framed hypotheses are as follows:

| Sl. | Hypotheses |
|-----|--|
| H1 | <i>Organizational learning is positively related to knowledge sharing.</i> |
| H2 | <i>Centralization is positively related to knowledge sharing.</i> |
| H3 | <i>Formalization is positively related to knowledge sharing.</i> |
| H4 | <i>Network strength is positively related to knowledge sharing.</i> |
| H5 | <i>Subsidiary competence is positively related to knowledge sharing.</i> |

Table 1- Investigation hypothesis

Sharing of knowledge is the systematic process of transmitting, creating, acquiring knowledge (implicit or tacit) from any organization, group, or person to another one (Abdullah & Liang, 2013; Mohammed, Zaidi & Nilashi, 2014). Thus, knowledge sharing is an integral part of successful internal relations between any organization and particularly its subsidiary.

Hypothesis 1: Organizational learning is positively related to knowledge sharing

Organizational learning refers to the knowledge that the organization attains mostly through its own experience (Argote & Miron-Spektor, 2011). This is enabled by the past and related knowledge in the specific knowledge area (Persson, 2006). This experience should ideally have a positive impact on the organizational performance (Zeng, Shenker, Lee & Song, 2013). It also gives a positional advantage to the subsidiary (Hult & Ketchen, 2001) by enhancing product quality, innovation and relationship performance, which improves economic performance (Lages, Silva & Styles, 2009). Sharing of knowledge gives an opportunity to extend employees' own understanding and determine a better mode of organizing and explaining the knowledge before it is shared (Wang & Noe, 2010). However, Persson (2006) suggested that higher amount of subsidiary knowledge can be a source of difficulty in the knowledge transfer process. Moreover, Zeng et al. (2013) pointed that certain researchers (Heimeriks, 2010; Zollo, 2009) reported that accumulation of experience was indirectly harmful to the firm's performance because of erroneous inferences of interpretation of experience and overconfidence on the subsidiary's side.

Hypothesis 2: Subsidiary competence is positively related to knowledge sharing

Any competence of the subsidiary is built by the presence of the 'conventional' top-down knowledge and from the knowledge inflow from the parent firm (Andersson et al., 2002; Meyer et al., 2011). At the primary level, the subsidiary follows the parent firm by assembling or by delivering and maintaining products or services that are supplied by the parent firm merely acting as listening posts; acquiring, filtering and sometimes also sending knowledge back to parent through reverse transfer (Chung, 2014). Over time they need to integrate their knowledge with shared local marketing knowledge. Persson (2006) proposed that acquiring competence requires a substantial amount of knowledge sharing. The flow of knowledge is ideally from units with higher competence to units with lower competence (Andersson et al., 2002). There is a positive influence of knowledge outflow on subsidiaries with strong competencies (Crespo et al., 2014). However, smaller and more distant subsidiaries most likely receive lesser attention by the headquarters (Bouquet & Birkinshaw, 2008). Poor communication and lack of incentives in knowledge sharing can hamper the application of knowledge (Miao et al., 2011). Miao et al.,

(2011) also advised the formation of effective knowledge transfer mechanisms and considering knowledge sharing as critical management goals (Bjorkman et al., 2004).

Hypothesis 3: Centralization is (positively) related to knowledge sharing

Ambos and Schlegelmilch (2007) depict centralization as the act of limiting the process of decision making to the headquarters. It is supposed to provide any parental advantage of the headquarters in terms of innovation to the subsidiary involved (Goold, Campbell & Alexander, 1998). Challenges posed by the parent on the subsidiary in terms of strategies enhanced organizational performance (Beugeksdijk, Nell & Ambos, 2017). Subsidiaries are evaluated and incentivized on the basis of their contribution to MNC-level performance (Kostova et al., 2016). Moreover, lesser administrative work causing cost saving at the subsidiary was observed. Centralization enhances subsidiary to headquarter knowledge transfers (Crespo et al., 2014). However, centralization hampers knowledge inflow and transfer from subsidiary to subsidiary (Crespo et al., 2014; Gupta & Govindrajana, 2000). Increased centralization has been responsible for lower vertical knowledge sharing (Gulev, 2007) and vice-versa (Foss & Pederson, 2002). For successful knowledge sharing, the international strategies suggested by the headquarters have to coincide with the strategies of the subsidiary (Ghoshal & Nohria, 1993). In addition, centralization according to Menon et al., (1996) increased dysfunctional conflict, thereby leading to diminishing performance of the new product. According to Ciabuschi et al. (2016), the functioning of the strategic innovation procedures at the subsidiary level is hindered by direct involvement. In contrast, decentralization facilitates timely knowledge sharing among the subsidiaries (Inkpen & Tsang, 2005).

Hypothesis 1: Organizational learning is (positively) related to knowledge sharing

Formalization is achieved through strict rules, policies, norms, routines and procedures (Ambos & Schlegelmilch, 2007; Gupta & Govindarajana, 1991). It acts as a regulatory mechanism accessible to the parent headquarters (Crespo et al., 2014). Lower level of formalization leads to protection of knowledge sharing activities (Wei, Teh & Asmawi, 2012). Ambos and Reitsperger (2004) established that formalization causes considerably lower functioning; whereas, on the contrary, Menon et al. (1996) reported that team spirit, lower communication barriers, interdepartmental connectedness and formalization enhanced functional conflict thereby improving the performance of any new product introduced.

Formalization can be the source of structured knowledge' (Boisot, 1998), which can be categorized, and re-contextualized (Brannen et al., 1998), making it consequently easier to transfer (Chung, 2014). Crespo et al. (2014) pointed out that formalization can act both ways, beneficial and harmful in terms of knowledge sharing and transfer.

Hypothesis 5: Network strength is positively related to knowledge sharing

Within an MNC, its network typically consists of the headquarters and subsidiaries connected through informal and formal ties to develop in the form of relational capital (Lee et al., 2008; 2010). The transfer of knowledge occurs within the inter-organizational network of differentiated units (Gupta & Govindrajana, 2000). Horizontal and vertical knowledge outflows at MNCs and its concept is emphasized by Crespo et al. (2014) as a network of multiple knowledge centers. Inkpen and Tsang (2005) suggested different conditions for promoting knowledge transfer in three variants of network, viz., Strategic alliances, Industrial districts and Intra-corporate networks. Enhanced communications and continued sharing of knowledge and information strengthen these relational ties (Argote, 2015). Thus, access to such exceptional resources is improved by robust connections in the MNC network. Networks can boost learning and performance at both individual and team levels via knowledge sharing (Moyo et al., 2015). The network may be influenced by the geographic distance between the headquarters and its subsidiary (Beugeldijk et al., 2017).

The primary parameter deciding the functioning of the relations between the subsidiary and its headquarter MNC can be measured through the performance of the organization involved. This can vary from their parent company as the subsidiaries may have access to various kinds of resources that may be different from the parent (Andersson, Forsgren & Pedersen, 2001). Therefore, organizational performance was considered as the dependent variable which was measured to observe the overall relationship of the HQ on the subsidiary. Moreover, organizational performance is possible mostly through knowledge sharing between the parent and the subsidiary in question. Thus, additional hypotheses involving organizational performance were proposed as follows:

Sl. Hypothesis

H6 Knowledge sharing is positively related to organizational performance

Table 2 - Additional hypothesis

Hypothesis 6: Knowledge sharing is positively related to organizational performance.

Knowledge sharing and its transfer between the headquarters and its subsidiary are critical for the success of the subsidiary (Ambos & Schlegelmilch, 2007; Mohammad et al., 2014) as it upgrades the competence of the MNCs (Andersson et al., 2002). Managers from the subsidiary require frequent exchange of information to accrue international experience, boost their firm knowledge and enhance their risk-management abilities (Luo, 2003). Subsidiary receiving less information related to business will have an impact on the performance (Beugeksdijk et al., 2017). Innovations developed by subsidiaries result in several benefits that can reduce costs and enhance the performance of MNCs. The significance of such innovations is realized by organizations as they implement them across various units and locations (Ciasbuschi, Dellestrand & Martin, 2011).

The above mentioned interactions between subsidiary and headquarters have been illustrated pictorially in Figure 2.

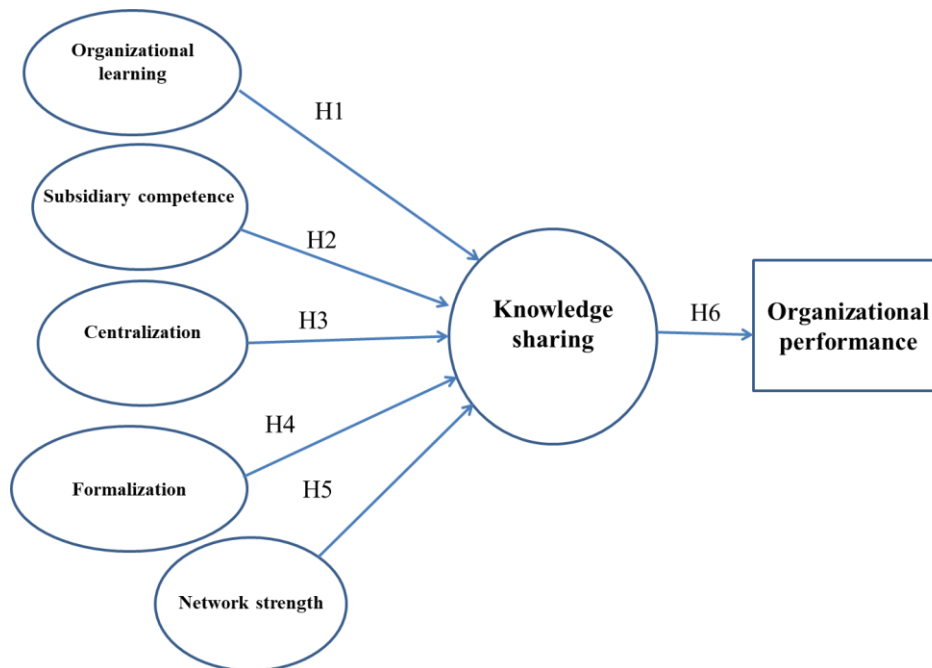


Figure 2 - Conceptual model showing the interaction of variables studied between subsidiary and parent-HQ

4. Methodology

The methodology is the heart of any research as it provides suitable approaches to achieve the research objectives (Cohen et al., 2013). It provides clarity to the research procedures, data collection and analysis which would lead to a logical conclusion. The main objective of any research is to formulate a test theory, so that it enhances the prognostic understanding of the concept in question.

4.1. Research design

Research design contributes to the structure of the study, and combines all the essentials of the research together. There are two approaches for research: quantitative and qualitative.

Quantitative method consists of data collected through the instrument such as questionnaires, which will be used to define the relationship between measured variables. These are generally measurable and numerical data that test the hypotheses by utilizing various variables. Thus, quantitative approach typically quantifies the collected data, extrapolates the results and predicts a theory fit for a larger population. These methods are controlled so that the results are precise, repeatable and can be analyzed statistically. However, they have some restrictions like trouble in governing all variables because of the multifaceted human nature. It also excludes notions of freedom, choice and morality of the participants.

Qualitative method, on the other hand, consists of subjective observations and interpretations with the aim of developing a theory that explains the experience holistically (Newman & Ridenour, 1998). It is collected through direct rendezvous, thereby making it a time-consuming process.

In this study, quantitative data were used to test hypotheses to understand the factors involved in maintaining internal relations of the headquarters with the subsidiary, from the subsidiary point of view.

4.2. Instrument

Questionnaires were employed in this study for quantitative analysis. It is considered as the main instrument for collecting data in research and therefore best suited for this kind of study. Questionnaires are a set of cautiously planned standardized questions presented in precisely the same way to a group of people for collecting information about one or more

specific subject(s) in which the investigator is interested (Burns & Dobson, 1981). These questions are called items (Lavrakas, 2008). It is a medium of conversation between the researcher and the participant occurring remotely. The cost involved in collecting and processing data is comparatively less and the team administrator requires minimal training. The need for travelling is eliminated as questionnaires cover a greater geographical extent (Jones et al., 2008). Additionally, the respondents are enabled to answer discretely thereby resulting in the reduction of researcher bias. The questionnaire has to be well designed in order to stimulate the participants to provide precise and comprehensive information thereby increasing the reliability of this method. All these advantages, makes questionnaires an ideal method to be used for this study. The questions were framed according to the factors studied in the literature reviewed for the study of the effect of internal relations between a subsidiary and its headquarters.

Before the implementation of the final questionnaire, a pre-test was conducted. It is important for a researcher to pose questions that are unambiguous in nature. Open-ended questions and multiple choice questions were posed to the respondents of the present study. An evaluation of five responses was conducted during the pre-test to verify the objectivity of the questionnaire and check whether the questions were comprehended by respondents. The questionnaire was amended on the basis of the pre-test responses and was used for the present study. The Likert scale technique was used in formulating the questions. Named after Rensis Likert, it is one of the most broadly employed types of attitude measurement in social science survey research (Lavrakas, 2008). Rather than employing a single question, a mean of several items is utilized by the Likert scale to depict a reliable measure. These items are listed on the scale as strongly agree, agree, neutral, disagree, and strongly disagree, and are denoted by the numbers, 1, 2, 3, 4, and 5, respectively.

4.3. Sampling profile and Data collection

For data collection purpose, two companies (name undisclosed), a major healthcare MNC and the other software giant with a global presence of more than seven countries worldwide were chosen. Both have many subsidiaries in the city of Bangalore, India with headquarters outside India. These subsidiaries have been of a part of the MNCs for more than 10 years, engaged in manufacturing, sales, services and research and development. Both the subsidiaries

had been created through acquisition mode. More than 1500 employees were working in the subsidiaries alone.

The questionnaires were filled up by the local employees working in the subsidiary. The present study employed the non-probability convenient sampling technique, in which the selection of subjects is done on the basis of their proximity to the researcher and their accessibility. The present study was conducted on primary data collected personally by the researcher himself. The study was done in subsidiaries located in Bangalore, India with headquarters in other countries. The sample size for the quantitative study was limited to 53 samples, out of which 26 belonged to one subsidiary of software MNC and 27 from one subsidiary of a health care MNC.

The questionnaire is divided into seven sections, each focused on gathering specific information on the factors involved in the study. Accordingly, the questions in this section were related to various aspects of internal relations such as organizational learning, subsidiary competence, knowledge sharing, centralization, formalization, and network strength on organizational performance as perceived by the employees of the subsidiary involved.

4.4. Measures

Before performing our survey, we needed to mention the measurements that influence the internal relations between subsidiary and headquarters. These measures were obtained from the Literature Review.

The perception of subsidiary employees was elaborated based on the following variables:

| Variable | Factors | Items | Scale | Adapted from |
|-------------------------|---------------------------------|--|---|-----------------------|
| Organizational learning | Collaboration and team learning | In my division, whenever people state their views, they also ask what others think. In my division, people spend time building trust with each other. In my division people openly discuss mistakes in order to learn from them. | Five-point Likert scale (1-Strongly disagree; 2-Disagree; 3-Neutral; 4-Agree; 5-Strongly agree) | (Jain & Moreno, 2015) |

| Variable | Factors | Items | Scale | Adapted from |
|----------|-------------------------------|---|---|-----------------------|
| | | In my division, teams/groups revise their thinking as a result of group discussions or information collected. My division enables people to get needed information at any time quickly and easily. | | |
| | Performance management system | My division makes its lessons learnt available to all employees. My division measures the results of the time and resources spent on training. My division maintains an up to date database of employee skills. My division encourages people to get answers from across the organization when solving problems. | Five-point Likert scale (1-Strongly disagree; 2-Disagree; 3-Neutral; 4-Agree; 5-Strongly agree) | (Jain & Moreno, 2015) |
| | Autonomy and freedom | My division encourages everyone to bring the customer's views into the decision-making process. In my division, leader mentors and coaches those he or she leads. In my division, teams/groups treat members as equals, regardless of rank, culture or other differences. In my division, people are encouraged to ask "why" regardless of rank. | Five-point Likert scale (1-Strongly disagree; 2-Disagree; 3-Neutral; 4-Agree; 5-Strongly agree) | (Jain & Moreno, 2015) |

| Variable | Factors | Items | Scale | Adapted from |
|----------|-----------------------------------|--|---|-----------------------|
| | | In my division, leaders continually look for opportunities to learn. | | |
| | Knowledge creation | <p>In my division, the percentage of knowledge workers is greater than last year.</p> <p>In my division, the number of individuals learning new skills is greater than last year.</p> <p>In my division, the percentage of total spending devoted to technology, R&D and information processing is greater than last year.</p> <p>In my division, no. of suggestions implemented is greater than last year.</p> <p>Employees take responsibility for their own learning.</p> | Five-point Likert scale (1-Strongly disagree; 2- Disagree; 3- Neutral; 4- Agree; 5- Strongly agree) | (Jain & Moreno, 2015) |
| | Knowledge level of the subsidiary | <p>Development of superior knowledge of the subsidiary compared to that of the other units in the business areas such as: -</p> <ul style="list-style-type: none"> • General management • Manufacturing • Marketing • Sales • Service • R&D | Five-point Likert scale (1-Very low; 2-Low; 3- Moderate; 4- High; 5- Very high) | (Fey & Furu, 2008) |

| Variable | Factors | Items | Scale | Adapted from |
|------------------------------|---------|--|--|-------------------------------|
| Subsidiary competence | | <p>The rate of the extent of the subsidiary's distinctive competence in the following areas/functions used and shared with other units within the corporation:</p> <ul style="list-style-type: none"> • General management • Manufacturing • Marketing • Sales • Service • R&D | <p>Five-point Likert scale (1-Very low; 2-Low; 3-Moderate; 4- High; 5-Very high)</p> | <p>(Fey & Furu, 2008)</p> |

| Variable | Factors | Items | Scale | Adapted from |
|---|---------------|--|--|--|
| Knowledge sharing and management | | <p>The organization encourages and facilitates knowledge sharing.</p> <p>Information and knowledge transfer between the headquarters and this subsidiary related to customers of the host country is.....</p> <p>Information and knowledge transfer between the headquarters and this subsidiary related to competitors of the host country is.....</p> <p>Information and knowledge transfer between the headquarters and this subsidiary related to needs and preferences of the host country is.....</p> <p>Information and knowledge transfer between the headquarters and this subsidiary related to marketing actions and strategy of the host country's competitors is.....</p> | Five-point Likert scale (1-Very low; 2-Low; 3-Moderate; 4-High; 5-Very high) | (Jain & Moreno, 2015; Lee, et al., 2008) |
| Centralization | Manufacturing | <p>Introduction and development of a new product.</p> <p>Changes in product design.</p> <p>Changes in manufacturing process.</p> | Five-point Likert scale (1-HQ decides alone; 2-HQ decides, but subsidiary | (Ghoshal & Nohria, 1989) |

| Variable | Factors | Items | Scale | Adapted from |
|----------------------|-----------------------------|--|---|---|
| | HR | Career development plans for senior managers. Employee recruitment, compensation, promotion, and layoffs. | can and does provide suggestions; 3- Both HQ and | (Ghoshal & Nohria, 1989; Gates & Egelhoff, 1986; Wang et al., 2014) |
| | Financial | Budget, finance, and investment. | subsidiary have roughly equal | (Gates & Egelhoff, 1986; Wang et al., 2014) |
| | Marketing | Production expansion and market promotion. | influence on the decision; 4- Subsidiary decide but HQ can and does provide suggestions; 5- Subsidiary decides alone). | (Gates & Egelhoff, 1986; Wang et al., 2014) |
| Formalization | Usage of rules and policies | For most tasks, the headquarters have provided a fairly well-defined set of rules and policies. To the extent possible there are manuals that define the courses of action to be taken under different situations. Headquarters continuously monitors to ensure that rules and policies are not violated. My company follows various technical standards. My company submits standardized reports to the HQ. | Five-point Likert scale (1-Very low; 2-Low; 3- Moderate; 4- High; 5- Very high) | (Ghoshal & Nohria, 1989; Nobel & Birkinshaw, 1998). |

| Variable | Factors | Items | Scale | Adapted from |
|-----------------------------------|-----------------------|---|---|--------------------------|
| | Normative integration | Extent of time the respondent actually worked in the headquarters. Perception of having a mentor at the headquarters, positive responses. The number of headquarters visits per year. | Five-point Likert scale (1-Very low; 2-Low; 3-Moderate; 4- High; 5-Very high) | (Ghoshal & Nohria, 1989) |
| Network strength | | There is very little interaction between our units. Relations among our foreign units are very close. Our foreign units discuss common problems frequently. Our foreign units share frequent communications. Our foreign units share close ties among themselves. | Five-point Likert scale (1-Strongly disagree; 2- Disagree; 3- Neutral; 4- Agree; 5- Strongly agree) | (Lee et al., 2008) |
| Organizational performance | | The level of your firm performance compared to your major competitors in the last three years in terms of: <ul style="list-style-type: none"> • Market share • Sales growth • Return on assets • Overall product/ service quality • Overall profitability • Customer satisfaction | Five-point Likert scale (1-Very low; 2-Low; 3-Moderate; 4- High; 5-Very high) | (Ghoshal & Nohria, 1989) |

Table 3 - Variables and its measures

All the upper-mentioned variables have been used within the final version of the survey, which had 17 key questions; all of them were used for further data analysis. The crucial variables in this study are: Organizational learning, Subsidiary competence, Knowledge

sharing, Centralization, Formalization, Network strength and Organizational performance. Data was obtained from subsidiaries that are positioned in Bangalore, India. Thus, our study exclusively covers the subsidiary point of view.

5. Results and discussion

The previous chapter on methodology dealt with the overall research design, instrument used, sample size, sampling method, data collection procedure, description of the variables and various tests employed. This chapter focuses on the statistical analysis of the collected data obtained from the 53 participants employed in the subsidiary division to understand the objectives defined in the introduction. The main objective of the present study was to understand the factors governing internal relations between a MNC headquarters and its subsidiary. Data was obtained from subsidiaries that are positioned in Bangalore, India. Thus, our study exclusively covers the subsidiary point of view.

The data has been delineated in the form of tables and figures as the interpretation of the results of the survey obtained as part of the research. The data were evaluated in an orderly fashion by counting the frequency of responses along with the mean of each factor evaluated from the review of literature. They include, i) Organizational learning ii) Knowledge sharing, iii) Subsidiary competence, iv) Centralization, v) Formalization, vii) Network strength, and viii) Organizational performance. Along with that, the collected data were evaluated using reliability analysis, factor analysis, correlation and regression.

The results have been divided into four sections: Section 1 presents the descriptive statistics of the respondents with respect to the factors pertaining to internal relations between the subsidiaries and headquarter. Section 2 describes the reliability and factor analysis of the involved questionnaire. Section 3 highlights the correlation between factors and formulates various hypotheses identified by the study and testing them using regression. All the analysis was conducted using SPSS software.

5.1. Factors controlling internal relations between the parent headquarters and the subsidiary

The opinion of the employees working in subsidiary with respect to organizational learning, knowledge sharing, centralization, formalization, network strength and organizational performance has been elaborated below.

5.1.1. Organizational learning

Organizational learning can be regarded as the dynamic formation, acquisition, preservation, integration and transmission of knowledge (Argote, 1999, Jain & Moreno, 2015). At a practical level, the capacity to learn and acclimatize is integral to improving the efficiency organizations in the long run (Argote & Miron Spektor, 2011). These learning processes may not be purely positive or negative, but a mixture of both, depending upon the conditions (Crossan & Berdrow, 2003). According to Argote (1999), organizational learning has three major components: acquisition, retention and transfer of knowledge. Table 4-8 summarizes the opinion of the employees working in the subsidiary on organizational learning. These were studied under five sub-topics, such as collaboration and team learning (with seven items), performance management system (included four items), autonomy and freedom (included five items), knowledge creation (also included five items) and eventually the knowledge level of the subsidiary in the subsidiary (with six items).

Collaboration and team learning relates to the functioning of employees as a team and the degree to which the employees of the subsidiary will share knowledge among each other and openly exchange views on problems faced so as to learn from each other's errors (Jain & Moreno, 2015). It was tested through opinions based on the helping nature of the co-employees with respect to learning, treating others with respect and asking for other's point of view while expressing their views (Table 4). Employees were spending time on building trust among each other. There was open discussion on the presence of any history of mistakes done by other employees in order to learn from them and discontinuing any repetitive errors. The teams revised their thinking as a result of group discussions and the collected information from fellow team members. Their divisions also enabled employees to get any required information as soon as possible with a lot of ease. Thus, it can be inferred that the majority of the respondents (66.6%) agreed or strongly believed that there was learning through participation of co-workers as a team.

| Collaboration and team learning | Response | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|--|-----------------|--------------------------|-----------------|----------------|--------------|-----------------------|
| In my division, people help | Frequency | 0 | 3 | 17 | 31 | 2 |
| | Percent | 0 | 5.7 | 32.1 | 58.5 | 3.8 |

| | | | | | | |
|---|-----------|-----|------|------|------|------|
| each other to learn. | | | | | | |
| In my division, people treat each other with respect | Frequency | 0 | 5 | 12 | 33 | 3 |
| | Percent | 0 | 9.4 | 22.6 | 62.3 | 5.7 |
| In my division, whenever people state their views, they also ask what others think. | Frequency | 1 | 4 | 13 | 31 | 4 |
| | Percent | 1.9 | 7.5 | 24.5 | 58.5 | 7.5 |
| In my division, people spend time building trust with each other | Frequency | 0 | 6 | 12 | 26 | 9 |
| | Percent | 0 | 11.3 | 22.6 | 49.1 | 16.9 |
| In my division people openly discuss mistakes in order to learn from them. | Frequency | 2 | 4 | 9 | 27 | 11 |
| | Percent | 3.8 | 7.5 | 17.0 | 50.9 | 20.8 |
| In my division, teams/groups revise their thinking as a result of group discussions or information collected. | Frequency | 0 | 3 | 14 | 24 | 12 |
| | Percent | 0 | 5.7 | 26.4 | 45.3 | 22.6 |
| My division enables people to get needed information at any time quickly and easily. | Frequency | 1 | 3 | 15 | 25 | 9 |
| | Percent | 1.9 | 5.7 | 28.3 | 47.2 | 17.0 |
| Overall | Frequency | 0.6 | 4.0 | 13 | 28 | 7 |
| | Percent | 1.1 | 7.5 | 24.8 | 53.1 | 13.5 |

Table 4 - Role of Organizational learning through collaboration and team learning

The next factor studied was performance management where the questions were related to identifying and measuring the improvement of performance through activities that involve

learning such as multiple training programs (Table 5). It is primarily to promote any proactive attitude of the organization (Jain & Moreno, 2015). Almost 62% of the employees agreed or strongly agreed to performance management. The employees acknowledged the availability of learning material for all of them. They also agreed that their division was responsible for measuring all the time and resources that were spent on training. Moreover, an up to date database on the skills of the employees were maintained. Their division also encouraged everybody to ask for help across the organization for solving any upcoming problems.

| Performance management | Response | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|-----------------|--------------------------|-----------------|----------------|--------------|-----------------------|
| My division makes its lessons learnt available to all employees. | Frequency | 0 | 8 | 17 | 22 | 6 |
| | Percent | 0 | 15.1 | 32.1 | 41.5 | 11.3 |
| My division measures the results of the time and resources spent on training. | Frequency | 0 | 5 | 14 | 27 | 7 |
| | Percent | 0 | 9.4 | 26.4 | 50.9 | 13.2 |
| My division maintains an up to date database of employee skills. | Frequency | 1 | 5 | 12 | 27 | 8 |
| | Percent | 1.9 | 9.4 | 22.6 | 50.9 | 15.1 |
| My division encourages people to get answers from across the organization when solving problems | Frequency | 0 | 4 | 15 | 29 | 5 |
| | Percent | 0 | 7.5 | 28.3 | 54.7 | 9.4 |
| Overall | Frequency | 0.25 | 5.5 | 14.5 | 26.25 | 6.5 |
| | Percent | 0.5 | 10.4 | 27.4 | 49.5 | 12.3 |

Table 5 - Role of Organizational learning through performance management

The concept of autonomy and freedom plays a critical role in understanding the presence of any organizational learning in the firm (Table 6). The ability of employees to openly question any well-established organizational process, experimentation for new processes and continuous learning was considered irrespective of rank and hierarchy (Jain & Moreno, 2015). Their

division was supportive of customer's views and were open to eventually incorporate them into any required decision-making processes. The employees accepted that they were being mentored by their supervisors. The group members also agreed that they were treated as equals, regardless of rank, culture, or other differences. Moreover, the employees were approved to ask any reason behind any activity or process regardless of the rank. According to the respondents, the supervisors continuously looked for any opportunities to enhance their own knowledge. Overall, 66% of the respondents agreed & strongly agreed that both the subsidiaries of the companies followed autonomy and freedom in organizational learning.

| Autonomy and freedom | Response | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|-----------------|--------------------------|-----------------|----------------|--------------|-----------------------|
| My division encourages everyone to bring the customer's views into the decision making process. | Frequency | 1 | 2 | 14 | 25 | 11 |
| | Percent | 1.9 | 3.8 | 26.4 | 47.2 | 20.8 |
| In my division, leader mentors and coaches those he or she leads. | Frequency | 0 | 4 | 9 | 29 | 11 |
| | Percent | 0 | 7.5 | 17.0 | 54.7 | 20.8 |
| In my division, teams/groups treat members as equals, regardless of rank, culture or other differences. | Frequency | 0 | 4 | 16 | 18 | 15 |
| | Percent | 0 | 7.5 | 30.2 | 34.0 | 28.3 |
| In my division, people are encouraged to ask "why" regardless of rank. | Frequency | 0 | 6 | 15 | 22 | 10 |
| | Percent | 0 | 11.3 | 28.3 | 41.5 | 18.9 |

| | | | | | | |
|--|-----------|-----|-----|------|------|------|
| In my division, leaders continually look for opportunities to learn. | Frequency | 0 | 5 | 14 | 25 | 9 |
| | Percent | 0 | 9.4 | 26.4 | 47.2 | 17.0 |
| Overall | Frequency | 0.2 | 4.2 | 13.6 | 23.8 | 11.2 |
| | Percent | 0.4 | 7.9 | 25.7 | 44.9 | 21.2 |

Table 6 - Role of Organizational learning through autonomy and freedom

Creation of knowledge is the capability of the organization to conceive some new intellectual capital/ strategies, significant for attaining a sustainable competitive advantage to the organization (Crossan & Berdrow, 2003; Tsoukas, 2009). Thus, the primary control for organizational knowledge creation is dependent upon the mental level of individual employees (Taylor & Osland, 2011). To ascertain the level of knowledge creation in the subsidiary's chosen for our study (Table 7), the employees confirmed that there was an increase of knowledge workers and employees gaining new skills during this year over last year. Along with this, there was an upsurge in the amount of money spent on technology, R&D and information processing also in this year. There was a greater number of propositions implemented during this year. The participants also agreed that they have become more responsible for their own learning. Therefore, it can be implied that there was a lot of knowledge created within the subsidiaries as 63% of the participants believed in it.

| Knowledge creation | Response | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|-----------------|--------------------------|-----------------|----------------|--------------|-----------------------|
| In my division, the percentage of knowledge workers is greater than last year Is this the original statement? | Frequency | 0 | 6 | 21 | 23 | 3 |
| | Percent | 0 | 11.3 | 39.6 | 43.4 | 5.7 |
| In my division, the number of individuals learning new skills is greater than last year. | Frequency | 0 | 4 | 12 | 30 | 7 |
| | Percent | 0 | 7.5 | 22.6 | 56.6 | 13.2 |
| | Frequency | 0 | 6 | 15 | 22 | 10 |

| | | | | | | |
|---|-----------|-----|------|------|------|------|
| In my division, the percentage of total spending devoted to technology, R&D and information processing is greater than last year. | Percent | 0 | 11.3 | 28.3 | 41.5 | 18.9 |
| In my division, no. of suggestions implemented is greater than last year | Frequency | 0 | 3 | 21 | 27 | 2 |
| | Percent | 0 | 5.7 | 39.6 | 50.9 | 3.8 |
| Employees take responsibility for their own learning | Frequency | 0 | 1 | 9 | 33 | 10 |
| | Percent | 0 | 1.9 | 17.0 | 62.3 | 18.9 |
| Overall | Frequency | 0 | 4 | 15.6 | 27 | 6.4 |
| | Percent | 0.0 | 7.5 | 29.4 | 50.9 | 12.1 |

Table 7 - Role of Organizational learning through knowledge creation

The last section focussed on the areas within the subsidiary such as general management, manufacturing, marketing, sales, service and R&D (Table 8), where the employees felt that the subsidiary had gained certain advantages with respect to organizational learning. More than 70% of the respondents accepted that there was an overall increase in all the divisions mentioned above, thereby implying a superiority in the overall knowledge level of the subsidiary. This may be because of high level of knowledge transfer of refined experts to any particular division within the organization (Fey & Furu, 2008).

| Subsidiary knowledge level | Response | Very low | Low | Average | High | Very high |
|-----------------------------------|-----------------|-----------------|------------|----------------|-------------|------------------|
| General management | Frequency | 0 | 1 | 17 | 28 | 7 |
| | Percent | 0.0 | 1.9 | 32.1 | 52.8 | 13.2 |
| Manufacturing | Frequency | 1 | 1 | 14 | 27 | 10 |
| | Percent | 1.9 | 1.9 | 26.4 | 50.9 | 18.9 |
| Marketing | Frequency | 0 | 3 | 9 | 34 | 7 |
| | Percent | 0.0 | 5.7 | 17.0 | 64.2 | 13.2 |
| Sales | Frequency | 0 | 3 | 12 | 24 | 14 |

| | | | | | | |
|---------|-----------|-----|-----|------|------|------|
| | Percent | 0.0 | 5.7 | 22.6 | 45.3 | 26.4 |
| Service | Frequency | 0 | 5 | 11 | 25 | 12 |
| | Percent | 0.0 | 9.4 | 20.8 | 47.2 | 22.6 |
| R&D | Frequency | 1 | 2 | 14 | 21 | 15 |
| | Percent | 1.9 | 3.8 | 26.4 | 39.6 | 28.3 |
| Overall | Frequency | 0.3 | 2.5 | 12.8 | 26.5 | 10.8 |
| | Percent | 0.6 | 4.7 | 24.2 | 50.0 | 20.4 |

Table 8 - Role of Organizational learning through subsidiary knowledge level

Thus, there was a significant amount of organizational learning happening in the subsidiary of both the chosen companies, corresponding to the maintenance of good internal relations between the parent HQ and its subsidiary. Figure 3 represents the mean of all the sub-factors studied under organizational learning.

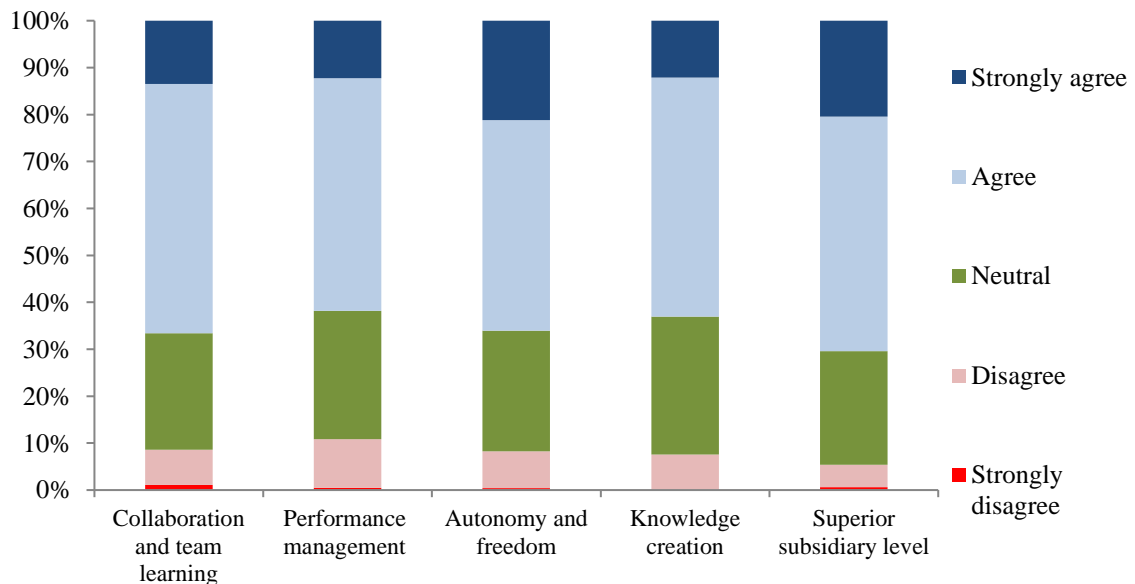


Figure 3 - Organizational learning

5.1.2. Subsidiary competence

The rate of subsidiary's distinctive competence was tested in six areas/functions used and shared with other units within the MNC (Table 9; Figure 4). A high percentage (68.6%; out of which 24% reported very high levels) of respondents believed that the competence level of the subsidiary was high on all fronts such as general management, manufacturing, marketing, R&D, sales and service. Thus, there was presence of superior and enhanced level of distinctive

competence in the sample subsidiaries tested, with highest in R&D and lowest in general management.

| Competence in | Response | Very low | Low | Average | High | Very high |
|--------------------|-----------|----------|------|---------|------|-----------|
| General management | Frequency | 0 | 3 | 18 | 23 | 9 |
| | Percent | 0 | 5.7 | 34.0 | 43.4 | 17.0 |
| Manufacturing | Frequency | 1 | 3 | 14 | 24 | 11 |
| | Percent | 1.9 | 5.7 | 26.4 | 45.3 | 20.8 |
| Marketing | Frequency | 0 | 1 | 15 | 24 | 13 |
| | Percent | 0 | 1.9 | 28.3 | 45.3 | 24.5 |
| Sales | Frequency | 0 | 7 | 10 | 20 | 16 |
| | Percent | 0 | 13.2 | 18.9 | 37.7 | 30.2 |
| Service | Frequency | 0 | 4 | 11 | 23 | 15 |
| | Percent | 0 | 7.5 | 20.8 | 43.4 | 28.3 |
| R&D | Frequency | 0 | 1 | 12 | 27 | 13 |
| | Percent | 0 | 1.9 | 22.6 | 50.9 | 24.5 |
| Overall | Frequency | 0.2 | 3.2 | 13.3 | 23.5 | 12.8 |
| | Percent | 0.3 | 6.0 | 25.2 | 44.3 | 24.2 |

Table 9 - Level of competence in various divisions of the subsidiary

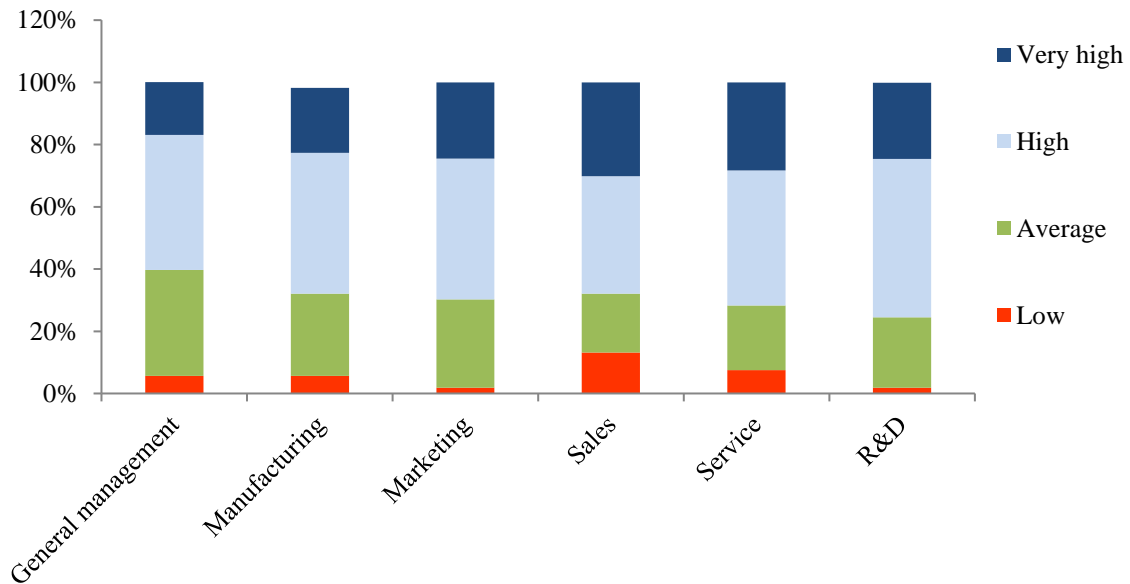


Figure 4 - Subsidiary competence

5.1.3. Centralization

Centralization is basically the division of power to control and coordinate any decision-making process in the particular organization in question and its operational units (Gates & Egelhoff, 1986). It is hierarchically organized with respect to headquarters (Ghoshal & Nohria, 1989). Inquiries done to test the status of centralization in various aspects (such as HR, marketing, manufacturing and finance) of the MNCs has been represented in Tables 10-12. The number of study items within Centralization was as follows with manufacturing at three items, followed by HR at two items and marketing and finance each with one item. Figure 5 represents the means of all divisions in which centralization was studied.

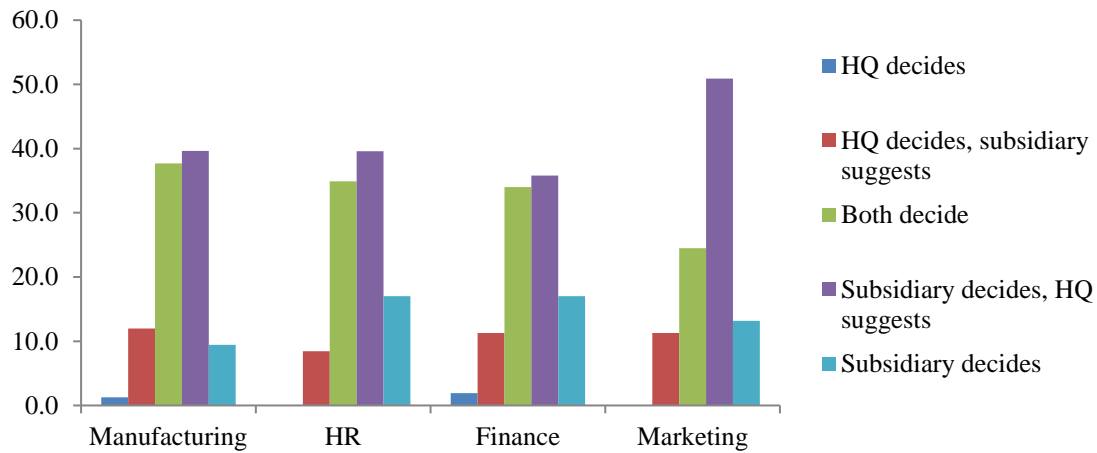


Figure 5 - Centralization in various departments

Table 10 demonstrates the amount of centralization in the manufacturing division of the subsidiary. The majority (40%) of the respondents agreed that the subsidiary mostly decides with the suggestions from the Headquarters in terms of manufacturing decisions. Almost equal amount (37.7%) also agreed that the control was shared between subsidiary and its parent. From the results, it is evident that the subsidiary was more influential on the introduction and development of a new product, whereas, in case of any changes in product design or manufacturing process, both subsidiary and HQ influenced any decision pertaining to it.

| Statement | Opinion | Subsidiary decides alone | Subsidiary decides, HQ suggests | Both decide | HQ decides, subsidiary suggests | HQ decides alone |
|------------------|-----------|--------------------------|---------------------------------|-------------|---------------------------------|------------------|
| Introduction and | Frequency | 1 | 29 | 19 | 3 | 1 |

| | | | | | | |
|-----------------------------------|-----------|------|------|------|------|-----|
| development of a new product. | Percent | 1.9 | 54.7 | 35.8 | 5.7 | 1.9 |
| Changes in product design. | Frequency | 8 | 17 | 21 | 6 | 1 |
| | Percent | 15.1 | 32.1 | 39.6 | 11.3 | 1.9 |
| Changes in manufacturing process. | Frequency | 6 | 17 | 20 | 10 | 0 |
| | Percent | 11.3 | 32.1 | 37.7 | 18.9 | 0 |
| Overall | Frequency | 5.0 | 21.0 | 20.0 | 6.3 | 0.7 |
| | % | 9.4 | 39.6 | 37.7 | 12.0 | 1.3 |

Table 10 - Amount of Centralization in manufacturing in the subsidiary

In case of HR also (Table 11), it was found to be similar to the manufacturing unit, where almost 40% of the respondents concurred that the subsidiary has the major role, however, with inputs from the headquarters, in contrast to almost 35% of the employees agreeing to decision making by both of them. This was true also for parameters of HR such as career development plans for senior managers and employee recruitment, compensation, promotion, and layoffs. Nobody agreed that the HQ alone is responsible for any HR related decisions.

| Statement | Opinion | Subsidiary decides alone | Subsidiary decides, HQ suggests | Both decide | HQ decides, subsidiary suggests | HQ decides alone |
|---|-----------|--------------------------|---------------------------------|-------------|---------------------------------|------------------|
| Career development plans for senior managers | Frequency | 8 | 21 | 19 | 5 | 0 |
| | Percent | 15.1 | 39.6 | 35.8 | 9.4 | 0 |
| Employee recruitment, compensation, promotion, and layoffs. | Frequency | 10 | 21 | 18 | 4 | 0 |
| | Percent | 18.9 | 39.6 | 34.0 | 7.5 | 0 |
| Overall | Frequency | 13.0 | 30.3 | 26.7 | 6.5 | 0.0 |
| | % | 17.0 | 39.6 | 34.9 | 8.5 | 0.0 |

Table 11 - Amount of Centralization in HR in the subsidiary

Table 12 displays the extent of centralization in finance and marketing departments. With respect to budget, finance and investments, the responses were almost equally distributed between decisions primarily done by both-sub subsidiary and parent or subsidiary with certain recommendations from the HQ. More than half of the respondents (50.9%) believed that the

production expansion and market promotion programs are made by the subsidiary with HQ providing suggestions for improvement.

| Statement | Opinion | Subsidiary decides alone | Subsidiary decides, HQ suggests | Both decide | HQ decides, subsidiary suggests | HQ decides alone |
|--|----------------|---------------------------------|--|--------------------|--|-------------------------|
| Budget, finance, and investment | Frequency | 9 | 19 | 18 | 6 | 1 |
| | Percent | 17.0 | 35.8 | 34.0 | 11.3 | 1.9 |
| Production expansion and market promotion. | Frequency | 7 | 27 | 13 | 6 | 0 |
| | Percent | 13.2 | 50.9 | 24.5 | 11.3 | 0 |

Table 12 - Amount of Centralization in finance and marketing in the subsidiary

It was interesting to note that the increase in subsidiary autonomy (reverse of centralization) promotes the accumulation of added knowledge (Foss & Pedersen, 2002; Gupta & Govindarajan, 2000; Inkpen & Tsang, 2005; Young & Tavares, 2004), which was also observed in our study (Sections 4.1.1 & 4.1.2). However, Ghoshal and Bartlett (1988) found no effect, whereas, Noorderhaven and Harzing (2009) reported the reverse that subsidiary autonomy was negatively linked to knowledge flow.

Even though, decentralization has many hurdles (Hoenen & Kostova, 2015), multiple studies emphasizing its benefits have been described. A study by Gulev (2007) suggests that less centralization accentuates equal rights, greater cooperation, and decreased amount of supervisions and a comparatively higher qualification of the lower strata of employees. This also is linked to equal amount of respect for colleagues, managers and subordinates among employees in European countries (such as Austria). Similar results were observed in our study also (Section- OL). However, Germany and Slovenia showed higher levels of centralization. Thite et al. (2014) also reported that decision making is mostly centralized at the corporate level where Indian IT MNCs are concerned. The study on subsidiaries located in India showed centralization in Korean and Swedish MNCs, whereas the Anglo-American MNC was more on the decentralized side (Awasthy & Gupta, 2010). Low centralization can be a key feature in the international strategy adopted by the company (Ghoshal & Nohria, 1993). The reason behind companies opting for decentralization of decision making can be the cost and feasibility to apply any relevant decision-making information to the HQ (Hoenen & Kostova, 2015).

5.1.4. Formalization

Formalization is defined as the use of rules, policies and norms in a systematic manner affecting decision-making processes (Ghoshal & Nohria, 1989). The study on formalization involved two aspects: a) Rules and policies (includes 5 items), and b) Normative integration (with 3 items). Table 13 and 14 highlighted the distribution of both the aspects of formalization as reported by the participants.

To understand the concept of formalization, activities involved in maintaining and managing the rules, policies and norms detailed by the HQ were considered here. Formalization is a part of the MNC policy, radiated, monitored and enforced by HQ (Crespo et al., 2014).

Overall, the amount of formalization followed in our case for both the subsidiaries was primarily on the higher side. None of the respondents recorded any ‘very low’ levels of formalization. More than 64% of the employees concurred to adherence of rules and policies with varying levels. Barely 7.2% of the respondents stated low levels of rules and policies specified by HQ were used in the subsidiary. Thus, the employees agreed that both the representative subsidiaries of the companies were following formalization at a high level and the employees confirmed that the headquarters had provided a well-defined set of rules and policies, which was being adopted by the subsidiaries in our study. The presence of manuals defining the course of action for smooth functioning of the office was also acknowledged by the employees. Moreover, the headquarters continuously monitored to ensure that rules and policies are not violated. Technical standards were also being followed by the subsidiary side. In addition to this, the subsidiaries submitted standardized reports to the parent-HQ routinely. The chosen subsidiaries mostly followed rules and regulations. This requires less administrative resources to institutionalize, and require minimal maintenance of administrative energy (Ghoshal & Nohria, 1989).

| Rules and policies | Response | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|--|-----------------|--------------------------|-----------------|----------------|--------------|-----------------------|
| For most tasks, the headquarters have provided a | Frequency | 0 | 2 | 18 | 31 | 2 |
| | Percent | 0 | 3.8 | 34.0 | 58.5 | 3.8 |

| | | | | | | |
|---|-----------|-----|------|------|------|------|
| fairly well-defined set of rules and policies | | | | | | |
| To the extent possible there are manuals that define the courses of action to be taken under different situations | Frequency | 0 | 5 | 13 | 34 | 1 |
| | Percent | 0 | 9.4 | 24.5 | 64.2 | 1.9 |
| Headquarters continuously monitors to ensure that rules and policies are not violated | Frequency | 0 | 4 | 12 | 31 | 6 |
| | Percent | 0 | 7.5 | 22.6 | 58.5 | 11.3 |
| My company follow various technical standards | Frequency | 0 | 7 | 17 | 26 | 3 |
| | Percent | 0 | 13.2 | 32.1 | 49.1 | 5.7 |
| My company submits standardized reports to the HQ | Frequency | 0 | 1 | 14 | 31 | 7 |
| | Percent | 0 | 1.9 | 26.4 | 58.5 | 13.2 |
| Overall | Frequency | 0.0 | 3.8 | 14.8 | 30.6 | 3.8 |
| | Percent | 0.0 | 7.2 | 27.9 | 57.8 | 7.2 |

Table 13 - Role of formalization through rules and policies in the subsidiaries

Normative integration (also called socialization) is primarily involved in sharing values and resources (Ghoshal & Nohria, 1989; Nobel & Birkinshaw, 1998). In this study (Table 14), the extent of association of the employees of the subsidiaries with the HQ was tested. More than half (56%) complied to adhering to higher amount of normative integration by their subsidiaries. Only 2.5% of the respondents reported low levels of follow up of any particular norms specific to the organization. A high level of respondents had frequently visited the headquarters and actually worked there. Employees working in the subsidiary also had positive perceptions about headquarters in general. They admitted to having a mentor at the HQ too.

| Understanding the norms of the headquarters | Response | Very low | Low | Average | High | Very high |
|--|-----------------|-----------------|------------|----------------|-------------|------------------|
| Extent of time the respondent actually worked in the headquarters. | Frequency | 0 | 1 | 23 | 25 | 4 |
| | Percent | 0.0 | 1.9 | 43.4 | 47.2 | 7.5 |
| Perception of having a mentor at the headquarters, positive responses. | Frequency | 0 | 3 | 21 | 26 | 3 |
| | Percent | 0.0 | 5.7 | 39.6 | 49.1 | 5.7 |
| The number of headquarters visits per year. | Frequency | 0 | 0 | 22 | 22 | 9 |
| | Percent | 0.0 | 0 | 41.5 | 41.5 | 17.0 |
| Overall | Frequency | 0 | 1.3 | 22.0 | 24.3 | 5.3 |
| | Percent | 0.0 | 2.5 | 41.5 | 45.9 | 10.1 |

Table 14 - Role of formalization through understanding the norms of the headquarters

Thus, in our case, formalization was being emulated by the subsidiaries involved in a moderate to high level and not in the strictest sense of following it fully. Figure 6 highlights the average of both the factors studied for formalization.

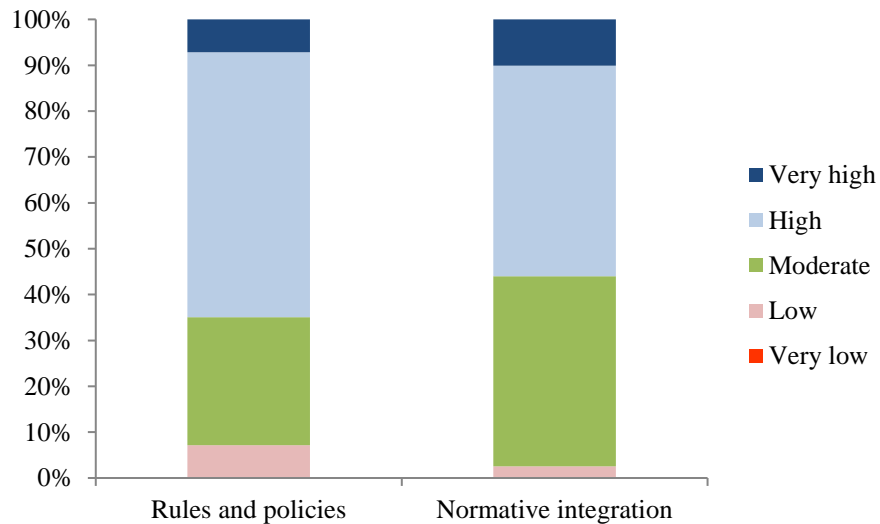


Figure 6 - Formalization in subsidiaries

Formalization plays an important role in knowledge creation and transfer (Grant 1996; Gupta & Govindarajan 2000; Nobel & Birkinshaw 1998). Usually, a higher amount of

formalization decreases the level of communication in horizontal knowledge transfers within the organization, but strengthens the HQ-subsidary relations (Crespo et al., 2014). This may be due to two possible reasons: a) formalization was unable to hinder any knowledge sharing here, or, b) formalization was responsible only to a minimal level, causing negligible effect on overall knowledge, or c) the amount of existing organizational learning and knowledge sharing is extremely high to negate any disadvantages of formalization.

5.1.5. Network strength

An organizational network consists of a formal/informal group structure made up of individuals within the organization who assemble together for a common cause such as an obstacle or an opportunity for a specific time frame (Moyo et al., 2015). These networks may cross borders, involving numerous functions or areas of specialization, besides geographical barriers. With respect to a MNC, the parent-HQ, subsidiaries, any alliances all fall under the network (Lee, 2010). Thus, network strength refers to the amount of ties among the subsidiaries and alliances within the same MNC network (Lee et al., 2008). These ties/connections form the main building blocks of any network as they establish linkages between employees (Moyo et al., 2015). These become critical for organizations by facilitating the effective flow of information and introducing innovation, thereby enhancing team learning and overall improving the organizational performance.

The assessment of network strength in our study was moderated through the understanding of two main criteria of networking; intensity of interactions and diversity within the relations using five items. Table 15 represents the summary of the opinions of the employees with regards to network strength (Figure 7). The majority of the employees (66.1%) concurred that there was a high level of interaction among the units, thereby making 73.6% employees believe that the subsidiary was closely related to the parent-HQ and other foreign units. More than 60% of the respondents discussed their common problems frequently, whereas almost 68% regularly shared communications with their foreign units. Almost three fourth of the participants agreed (out of which 22.6% strongly) that the degree of ties was higher within the subsidiaries and its foreign units.

Thus, it can be summarized from our results that the overall network strength of the subsidiaries selected for the study was quite extensive as perceived by the employees of the subsidiaries.

It has already been implied in sections 4.1.2, 4.1.3 and 4.1.4, that the increased levels of organizational knowledge obtained in this study may be due to decreased levels of centralization and increased level of formalization. This may be possible only due to the presence of a strong and dense network among the units. This has also been corroborated by several researchers (Bititci et al., 2011; Fang, Lee & Schilling, 2010b; Kauppila et al., 2011; Luo, 2003; Nahapiet & Ghoshal, 2011; Noorderhavan & Harzing, 2009). Along with this, elevated network within the subsidiary leads to enhanced subsidiary competence (observed by Mudambi et al., 2014) as also observed in our case. It enables different foreign units to overcome possible communication barriers, making synergistic benefits such as complementary or new knowledge likely to be developed (Nohria & Ghoshal, 1997). The broad knowledge base gives the firm higher flexibility and more ideas to respond to local challenges (Lee, 2010). Thus, the organization itself can be viewed a set of differentiated network with increased advantages (Mudambi et al., 2014).

| Network strength among units | Average of | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|-------------------|--------------------------|-----------------|----------------|--------------|-----------------------|
| There is very little interaction between our units. | Frequency | 1 | 3 | 14 | 34 | 1 |
| | Percent | 1.9 | 5.7 | 26.4 | 64.2 | 1.9 |
| Relations among our foreign units are very close. | Frequency | 0 | 2 | 12 | 32 | 7 |
| | Percent | 0 | 3.8 | 22.6 | 60.4 | 13.2 |
| Our foreign units discuss common problems frequently. | Frequency | 0 | 2 | 19 | 22 | 10 |
| | Percent | 0 | 3.8 | 35.8 | 41.5 | 18.9 |
| Our foreign units share frequent communications. | Frequency | 0 | 4 | 13 | 20 | 16 |
| | Percent | 0 | 7.5 | 24.5 | 37.7 | 30.2 |
| Our foreign units share close ties among themselves. | Frequency | 0 | 1 | 13 | 27 | 12 |
| | Percent | 0 | 1.9 | 24.5 | 50.9 | 22.6 |
| Overall | Frequency | 0.2 | 2.4 | 14.2 | 27 | 9.2 |
| | Percent | 0.38 | 4.54 | 26.76 | 50.94 | 17.36 |

Table 15 - Network strength in subsidiaries

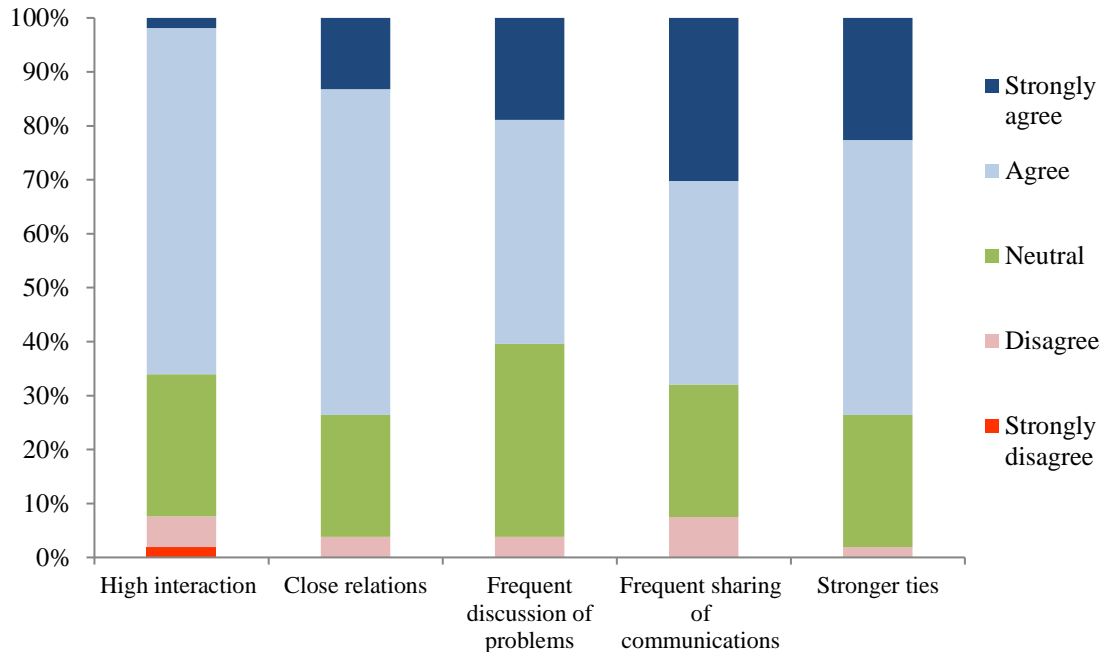


Figure 7- Network strength of subsidiaries

5.1.6. Knowledge sharing

As knowledge is the main source of competitive advantage (Fey & Furu, 2010), sharing it passes this advantage to the recipient. Mostly the HQ is the primary provider of organizational know-how to the subsidiary. Therefore, the parent HQ is constantly under pressure to create an additional advantage for the subsidiary (Beugelsdijk et al., 2017). The reverse can also happen (called reverse transfer), although rarely, as reported by Chung (2014), Ciasbuschi, Kong and Su (2017), Gupta & Govindrajana (2000), and Noorderhaven and Harzing (2009). Any sharing is an extremely difficult process (Grant, 1996; Gupta & Govindarajan, 2000) due to geographic dispersion (Fey & Furu, 2008), ignorance of tacit knowledge, cultural distance, over reliance on others as knowledge providers (Kauppila, Rajala & Jyrama, 2011). This is possible mainly through knowledge transfer (Lee et al., 2008). Thus, the extent of knowledge sharing was measured using knowledge transfer in mind by asking the respondents about these five basic aspects of knowledge management (Table 16).

| Knowledge transfer | Response | Very low | Low | Average | High | Very high |
|--|-----------------|-----------------|------------|----------------|-------------|------------------|
| The organization encourages and facilitates knowledge sharing | Frequency | 0 | 1 | 22 | 25 | 5 |
| | Percent | 0 | 1.9 | 41.5 | 47.2 | 9.4 |
| Information and knowledge transfer between the headquarters and this subsidiary related to customers of the host country is | Frequency | 0 | 8 | 7 | 30 | 8 |
| | Percent | 0 | 15.1 | 13.2 | 56.6 | 15.1 |
| Information and knowledge transfer between the headquarters and this subsidiary related to competitors of the host country is | Frequency | 0 | 4 | 19 | 26 | 4 |
| | Percent | 0 | 7.5 | 35.8 | 49.1 | 7.5 |
| Information and knowledge transfer between the headquarters and this subsidiary related to needs and preferences of the host country is | Frequency | 0 | 3 | 13 | 34 | 3 |
| | Percent | 0 | 5.7 | 24.5 | 64.2 | 5.7 |
| Information and knowledge transfer between the headquarters and this subsidiary related to marketing actions and strategy of the host country's competitors is | Frequency | 0 | 6 | 22 | 15 | 10 |
| | Percent | 0 | 11.3 | 41.5 | 28.3 | 18.9 |
| Overall | Frequency | 0.0 | 4.4 | 16.6 | 26 | 6.0 |
| | Percent | 0.0 | 8.3 | 31.3 | 49.1 | 11.3 |

Table 16 - Role of Knowledge sharing

Knowledge management applies to an assortment of organizational practices and techniques to recognize, characterize and allocate knowledge, know-how, proficiency, intellectual capital and other forms of knowledge for leverage, reuse and transfer of knowledge and learning within the organization (Iandoli & Zollo, 2007). Within knowledge management, high number of employees admitted that the organization supported and facilitated knowledge

sharing. They also assured that information and knowledge transfer between the headquarters and this subsidiary related to customers, competitors, requirements, preferences, marketing actions and strategies of the subsidiary country was substantially higher. Knowledge transfer measures the level of intensity of knowledge flow between HQ and the subsidiary (Lee et al., 2008). Overall, 60% of the employees acknowledged increased level of knowledge sharing, thereby demonstrating an improved knowledge management in the subsidiaries chosen in our study. Figure 8 displays the mean value of the responses obtained on knowledge sharing and transfer within the organization.

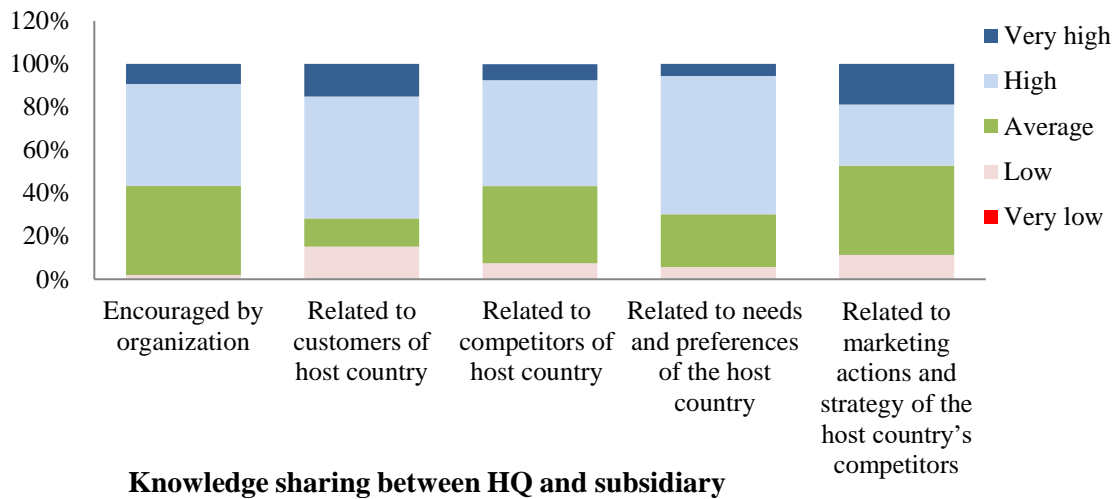


Figure 8 - Knowledge sharing and transfer

Therefore, it can be concluded from the above discussion that there was an additional amount of knowledge sharing and knowledge transfer specifically between the HQ and the subsidiary. Along with this, the presence of superior knowledge in our subsidiaries (Section 5.1.1) may also contribute to higher knowledge sharing. This was also elaborated by Fey and Furu (2008). Contrasting results were observed by Gupta and Govindrajana (2000) where even though, there was knowledge flow between the parent and its subsidiary but the rate appeared to be low as their study was focused on the transfer of tacit knowledge.

5.1.7. Organizational performance

The entire success of any organization depends on the persistent superior organizational performance (Argote, 2015). Organizational performance can be referred as the impact of the

subsidiary on the rest of the MNC through its knowledge development and knowledge sharing activities (Andersson et al., 2001). Therefore, ascertaining this would help us understand the contribution of the subsidiary and any problems faced by the subsidiary in any particular area. However, there are limited studies on subsidiary performance as a whole (Andersson et al., 2001; Yamin & Andersson, 2011; Young & Tavares, 2004).

The possible outcomes of organizational performance are the pointers that indicate the extent of efficiency with respect to corporate image, competences and financial performance, etc. (Mabey, Salaman & Storey, 1998). The conventional concept of organizational performance comprises of financial parameters such as market share, sales growth, return on assets, overall quality of any product or service, turnover, profitability, productivity and eventually customer satisfaction (Ghoshal & Nohria, 1989). Table 17 exhibits the details of the organizational performance levels at various financial components (Figure 9).

Maximum number of respondents reported a high level of organizational performance in all the financial categories studied here. The highest was observed in sales growth (79.2%; out of which 26.4% reported it to be very high), followed by customer satisfaction (77.4%; out of which 20.8% responded it to be very high), overall product and service quality (75.5% ; out of which 20.8% responded it to be very high), return on assets (75.4% out of which 22.6% reported it to be very high), market share (67.9%; out of which 17% was reported as very high) and lastly, overall profitability by 66.1% (out of which, almost 19% was very high). None of the respondents reported any very low for any of the elements studied. Moreover, there were no reports of low levels in case of customer satisfaction by the employees.

Therefore, it can be accepted that there was an increased level of organizational performance in comparison to their major competitors in the last three years, as perceived by the employees of the selected subsidiaries.

| Level of performance | Average of | Very low | Low | Moderate | High | Very high |
|-----------------------------|-------------------|-----------------|------------|-----------------|-------------|------------------|
| Market share | Frequency | 0 | 2 | 15 | 27 | 9 |
| | Percent | 0 | 3.8 | 28.3 | 50.9 | 17.0 |
| Sales growth | Frequency | 0 | 4 | 7 | 28 | 14 |
| | Percent | 0 | 7.5 | 13.2 | 52.8 | 26.4 |

| | | | | | | |
|-------------------------------------|-----------|---|-----|------|------|------|
| Return on assets | Frequency | 0 | 3 | 10 | 28 | 12 |
| | Percent | 0 | 5.7 | 18.9 | 52.8 | 22.6 |
| Overall product/ service quality | Frequency | 0 | 2 | 11 | 29 | 11 |
| | Percent | 0 | 3.8 | 20.8 | 54.7 | 20.8 |
| Overall profitability | Frequency | 0 | 4 | 14 | 25 | 10 |
| | Percent | 0 | 7.5 | 26.4 | 47.2 | 18.9 |
| Customer satisfaction | Frequency | 0 | 0 | 12 | 30 | 11 |
| | Percent | 0 | 0.0 | 22.6 | 56.6 | 20.8 |

Table 17 - The level of organizational performance in various financial aspects

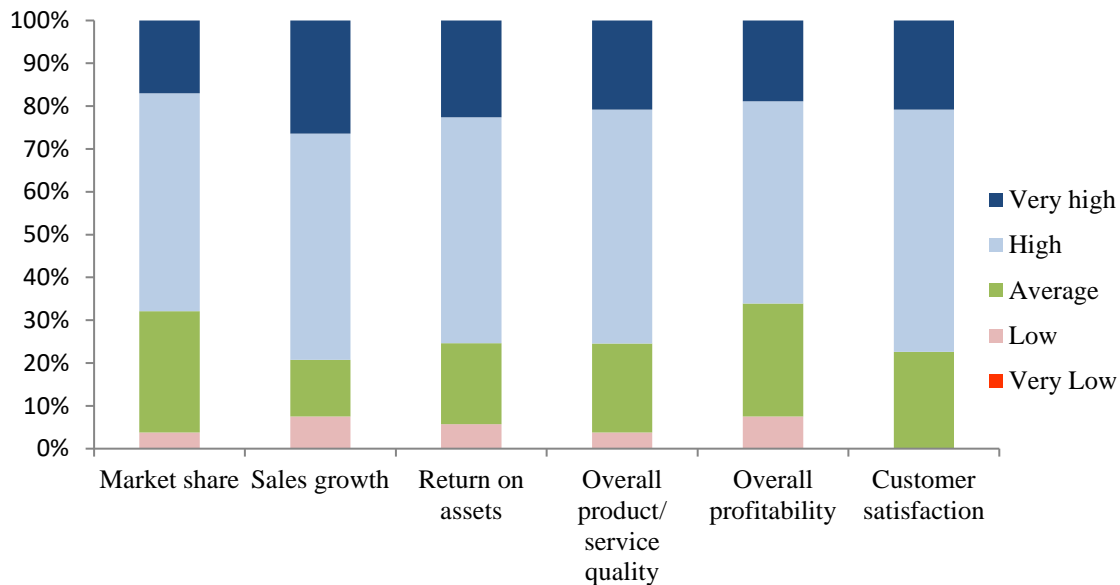


Figure 9 - Organizational performance of subsidiaries

5.2. Reliability and validity

Reliability refers to the consistency of measurements or of a measuring questionnaire, used to describe a test. It is inversely related to random error, meaning if reliability is high, where random error is low. In other words, it is the extent of homogeneity to produce similar results on repeated trials. Internal consistency is measured using a reliability coefficient of Cronbach's alpha (Cronbach, 1951).

The validity of the research instrument is essential to understand how well the concept is demarcated by the measures. Validity is the statistical measure of a test's ability to measure what it is intended to measure (Davidshofer & Murphy, 2005).

The validity refers to the degree to which a measure accurately represents what it is supposed to (Hair, Anderson, Tatham & Black, 1992). Content validity, construct validity, and predictive validity are the three types of validity normally tested. Content validity, also known as the face validity, assesses the relation between the individual items and the concept it measures. Construct validity has often been defined as the practical demonstration of a test to measure the construct it claims to be measuring. The construct validity was measured through the factorial analysis. Applying the guideline for evaluating the strength of the loading, the range of selection of factors was from an Eigenvalue of 0.4 to 1 were chosen for loading (Hair et al., 1992; Straub, 1989). Factors that loaded below 0.4 were suppressed for better reading of the results (Samuels, 2016).

5.2.1. Reliability

Table 18 highlights the reliability values obtained from the questionnaire. The value of the Cronbach's alpha coefficient for the constructs ranged from 0.679 to 0.915. Cronbach alpha is acceptable in the range 0.6 to 0.7, whereas from 0.7 to 0.8 is satisfactory, 0.8 to less than 0.95 is considered to be good, beyond which they can be considered as redundant items testing the same question (Bland & Altman, 1997; Hinton, McMurray & Brownlow, 2014). Thus, network strength was found to be acceptable (5 items; $\alpha=0.67$); formalization (8 items; $\alpha=0.79$), knowledge sharing (5 items; $\alpha=0.74$) and organizational performance (6 items; $\alpha=0.76$) were satisfactory; and the rest, subsidiary competence (6 items; $\alpha=0.80$), centralization (7 items; $\alpha=0.85$), and organizational learning (27 items; $\alpha=0.91$) were good and within the limits. Thus, the test results are reliable and robust enough for analyzing and drawing statistical inferences.

| Factor | Cronbach's Alpha | N of Items |
|----------------------------|-------------------------|-------------------|
| Organizational learning | 0.915 | 27 |
| Knowledge Sharing | 0.739 | 5 |
| Subsidiary competence | 0.803 | 6 |
| Centralization | 0.852 | 7 |
| Formalization | 0.797 | 8 |
| Network strength | 0.679 | 5 |
| Organizational performance | 0.762 | 6 |

Table 18 - Reliability of the questionnaire

5.2.2. Factor analysis

The following sections elaborate the validity tests done on various factors influencing the internal relations of the subsidiary with its parent HQ.

5.2.2.1. Organizational learning

Table 19 shows the results of the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity for organizational learning. KMO measure determines the sampling adequacy of the data collected (Kaiser, 1970). The acceptable limit for KMO values of individual items should be a minimum value of 0.5, while values from 0.6 to 0.8 are moderate and values above 0.9 are considered to be excellent (Field, 2013). A value of 0.559 was obtained for this study, suggesting acceptable sampling adequacy.

Bartlett's test of sphericity testing the multivariate normality of the set of distributions and the strength of the relationship between the variables was significant ($\chi^2(351) = 818.400$, $p < .05$). A significance value of $p=0.00$ indicates that the data do not produce an identity matrix or differ significantly from identity (George & Mallery, 2000). This means that the variables are correlated highly enough to provide a reasonable basis for factor analysis as in this case.

| | | |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.559 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 818.400 |
| | Df | 351 |
| | Sig. | .000 |

Table 19 - KMO and Bartlett test on organizational learning

The correlation matrix with the items that compose Organizational learning is represented in Appendix 1 (Table 45).

Organizational learning together explained 69.16% of the variability in the data, out of which the first factor explains 31.76% of the variance.

Table 20 summarizes the Rotated Component matrix for 27 items for organizational learning into seven factors that determine the organizational learning as perceived by the employees. The analysis of the results demonstrates that the first factor derived from this process has minimum factor loadings of 0.484, with a range between 0.484 to 0.837.

| Organizational learning | Component | | | | | | |
|-------------------------|-----------|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | | | |
|---|-------|-------|-------|-------|--|--|--|
| In my division, leaders continually look for opportunities to learn. | 0.837 | | | | | | |
| My division encourages people to get answers from across the organization when solving problems. | 0.707 | | | | | | |
| In my division, people spend time building trust with each other. | 0.557 | | | | | | |
| Superior knowledge level in Marketing | 0.550 | | | | | | |
| In my division, people are encouraged to ask “why” regardless of rank. | 0.541 | | | | | | |
| Employees take responsibility for their own learning | 0.484 | | | | | | |
| Superior knowledge level in R&D | | 0.812 | | | | | |
| In my division, leader mentors and coaches those he or she leads. | | 0.793 | | | | | |
| In my division, the percentage of total spending devoted to technology, R&D and information processing is greater than last year. | | 0.595 | | | | | |
| In my division, teams/groups treat members as equals, regardless of rank, culture or other differences. | | 0.555 | | | | | |
| In my division, people help each other to learn. | | | 0.835 | | | | |
| In my division, people treat each other with respect. | | | 0.674 | | | | |
| My division maintains an up to date database of employee skills. | | | 0.597 | | | | |
| My division makes its lessons learnt available to all employees. | | | 0.524 | | | | |
| My division measures the results of the time and resources spent on training. | | | 0.411 | | | | |
| In my division, teams/groups revise their thinking as a result of group discussions or information collected. | | | | 0.746 | | | |
| Superior knowledge level in Service | | | | 0.614 | | | |
| My division enables people to get needed information at any time quickly and easily. | | | | 0.564 | | | |
| In my division people openly discuss mistakes in order to learn from them. | | | | 0.538 | | | |

| | | | | | | | |
|---|--|--|--|-------|-------|-------|-------|
| My division encourages everyone to bring the customer's views into the decision making process. | | | | 0.465 | | | |
| Superior knowledge level in Manufacturing | | | | | 0.813 | | |
| In my division, no. of suggestions implemented is greater than last year | | | | | 0.680 | | |
| In my division, whenever people state their views, they also ask what others think. | | | | | | 0.814 | |
| Superior knowledge level in General management | | | | | | 0.616 | |
| In my division, the percentage of knowledge workers is greater than last year Is this the original statement? | | | | | | | 0.729 |
| Superior knowledge level in Sales | | | | | | | 0.603 |
| In my division, the number of individuals learning new skills is greater than last year. | | | | | | | 0.559 |
| Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. | | | | | | | |
| Rotation converged in 15 iterations. | | | | | | | |

Table 20 - Rotated Component matrix^a for items for organizational learning

5.2.2.2. *Subsidiary competence*

The results of the Kaiser-Meyer-Olkin (KMO) show a value of 0.783 in this study suggesting acceptable sampling adequacy. The value of Bartlett's test of sphericity was 99.29 and significant with a p-value of 0.000 confirming the factorability of the correlation matrix. The Bartlett's test of sphericity, therefore, showed that the variables within factors in this study are correlated with each other.

| | | |
|--|--------------------|--------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | 0.783 | |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 99.292 |
| | df | 15 |
| | Sig. | 0.000 |

Table 21 - KMO and Bartlett test on knowledge sharing and subsidiary competence

A correlation matrix of the indicators of subsidiary competency is provided in Appendix I (Table 46).

Subsidiary competence explained 69.58% of the variability in the data, out of which the first factor contributes to 51.11% of the variance. The Rotated component matrix for six items

for subsidiary competence divided into two factors. The factor loadings of the first factor of subsidiary competence construct obtained from six items ranged from 0.55 to 0.85.

| Subsidiary competence in | Component | |
|--|-----------|-------|
| | 1 | 2 |
| Manufacturing | 0.850 | |
| Marketing | 0.831 | |
| General management | 0.736 | |
| Sales | 0.556 | |
| R&D | | 0.887 |
| Service | | 0.751 |
| Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. ^a | | |
| a. Rotation converged in 3 iterations. | | |

Table 22 - Rotated Component matrix^a for items for Subsidiary competence

5.2.2.3. Centralization

The Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1970) was used to measure the adequacy of the sample for extraction of factors in centralization (Table 23). The KMO value found to be 0.83, which is indicative of a data set that is acceptable and moderately desirable for factor analysis. The analysis of the sphericity of the distribution (Bartlett's sphericity test) allowed the rejection of hypothesis according to which the matrix would be unitary ($\chi^2(6) = 36.81, p = 0.000$). This result implies that the data is approximately multivariate normal and acceptable for factor analysis.

| | | |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | 0.837 | |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 130.978 |
| | df | 21 |
| | Sig. | .000 |

Table 23 - KMO and Bartlett test on centralization

The correlation matrix with items that compose centralization is presented in Appendix I (Table 51).

The first factor of centralization explained 53.19% of the variability in the data. As only one component was extracted, therefore, the solution cannot be rotated.

5.2.2.4. Formalization

Bartlett’s test of sphericity, which tests the overall significance of all the correlations within the correlation matrix, was significant ($\chi^2 (28) = 120.77, p < 0.001$), indicating that it is suitable to use the factor analysis model with this set of data (Table 24). The Kaiser-Meyer-Olkin measure of sampling adequacy indicated that the strength of the relationship between variables was moderate (KMO = 0.75).

| | | |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.751 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 120.777 |
| | df | 28 |
| | Sig. | 0.000 |

Table 24 - KMO and Bartlett test on formalization

Table 48 in Appendix I summarizes the correlation matrix for items composing formalization.

Formalization explained 68.23% of the variability in the data, out of which the first factor contributes to 42.17% of the variance. The Rotated component matrix for eight items for subsidiary competence divided into three factors. The factor loadings of the first factor of formalization construct obtained from four items ranged from 0.48 to 0.86.

| Formalization | Component | | |
|---|-----------|-------|-------|
| | 1 | 2 | 3 |
| Extent of time the respondent actually worked in the headquarters. | 0.865 | | |
| The number of headquarters visits per year. | 0.795 | | |
| Perception of having a mentor at the headquarters, positive responses. | 0.770 | | |
| Headquarters continuously monitors to ensure that rules and policies are not violated | 0.488 | | |
| My company follow various technical standards | | 0.878 | |
| My company submits standardized reports to the HQ | | 0.764 | |
| For most tasks, the headquarters have provided a fairly well-defined set of rules and policies; | | | 0.795 |
| To the extent possible there are manuals that define the courses of action to be taken under different situations | | | 0.749 |

| |
|--|
| Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. ^a |
| a. Rotation converged in 5 iterations. |

Table 25 - Rotated Component matrix^a for items for Formalization

5.2.2.5. Network strength

The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.75, above the commonly recommended value of 0.6, and Bartlett's test of sphericity was significant ($\chi^2 (28) = 120.77$, $p < .05$).

| | | |
|--|--------------------|--------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.659 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 46.369 |
| | Df | 10 |
| | Sig. | 0.000 |

Table 26 - KMO and Bartlett test on network strength

The correlation matrix given in Appendix I (Table 49) presents the items that compose network strength.

Factor Analysis performed on five items of network strength with varimax Rotation indicated the reduction of the five items on network strength into two factors. The total cumulative variance explained by the combination of two factors is 67.11%. Table 27 puts forward the results obtained from the Rotated Component Matrix. The analysis of the results demonstrates that the first factor derived from this process has minimum factor loadings of 0.637, with a range between 0.637 to 0.84.

| Network strength | Component | |
|---|-----------|-------|
| | 1 | 2 |
| Our foreign units share frequent communications. | 0.840 | |
| Our foreign units share close ties among themselves. | 0.828 | |
| Our foreign units discuss common problems frequently. | 0.637 | |
| There is very little interaction between our units. | | 0.887 |

| | | |
|--|--|-------|
| Relations among our foreign units are very close. | | 0.760 |
| Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. ^a | | |
| a. Rotation converged in 3 iterations. | | |

Table 27 - Rotated Component matrix^a for items for Network strength

5.2.2.6. Knowledge sharing

Table 28 demonstrates the results of the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity for knowledge sharing. A value of 0.708 was obtained for this study, suggesting acceptable sampling adequacy.

Bartlett's test of sphericity testing the multivariate normality of the set of distributions and the strength of the relationship between the variables was significant ($\chi^2 (10) = 66.733, p < .05$). A significant value of $p=0.00$ indicates that these variables provide a reasonable basis for factor analysis.

| | | |
|--|--------------------|--------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | 0.708 | |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 66.733 |
| | df | 10 |
| | Sig. | .000 |

Table 28 - KMO and Bartlett test on knowledge sharing

The correlation matrix with the items of knowledge sharing are provided in Table 47 in Appendix I.

Factor analysis of knowledge sharing shows that the variables explained 72.65% of the variability in the data, out of which the first factor is accountable for 50.13% of the variance in the data. The rotated component matrix (Table 29) showed that all the measurement items loaded onto their respective factors, indicating no substantial common method bias in this study. The analysis of the results shows that the first factor derived from this process has minimum factor loadings of 0.65, ranging to 0.88.

| Knowledge sharing | Component | |
|--|-----------|-------|
| | 1 | 2 |
| Information and knowledge transfer between the headquarters and this subsidiary related to customers of the host country is..... | 0.881 | |
| The organization encourages and facilitates knowledge sharing. | 0.796 | |
| Information and knowledge transfer between the headquarters and this subsidiary related to competitors of the host country is | 0.655 | |
| Information and knowledge transfer between the headquarters and this subsidiary related to needs and preferences of the host country is | | 0.916 |
| Information and knowledge transfer between the headquarters and this subsidiary related to marketing actions and strategy of the host country's competitors is | | 0.722 |
| Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. ^a | | |
| a. Rotation converged in 3 iterations. | | |

Table 29 - Rotated Component matrix^a for items for knowledge sharing

5.2.2.7. Organizational performance

Table 30 determines the KMO value to be 0.75 (>0.5), thus a high degree of validity of the data was observed. Further, Bartlett's Test of Sphericity indicated a high Chi-square value of 69.26 with 15 as degrees of freedom at significance level of 0.000 which is highly significant ($p < 0.001$), and therefore, the factor analysis is appropriate.

| | | |
|--|--------------------|--------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | 0.751 | |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 69.263 |
| | df | 15 |
| | Sig. | .000 |

Table 30 - KMO and Bartlett test on organizational performance

Table 50 in Appendix I lists the correlation matrix that is included in organizational performance.

Organizational performance explained 45.77% of the variability in the data. Similar to centralization, only one component was extracted, thereby limiting the rotation of the components.

5.3. Correlation of the factors and testing of hypothesis

5.3.1. Correlation among variables

Correlation (denoted as 'r') is used to measure the strength of association between two variables and ranges between -1 (perfect negative correlation) to 1 (perfect positive correlation). It is interpreted on the absolute value of the correlation, with 0.9-1 as very high, 0.7-0.9 as high, 0.5-0.7 as moderate, 0.3-0.5- low and less than 0.3 as negligible (Hinkle et al., 2003). Table 31 represents any correlation present between all the variables identified to study the internal relationship between the subsidiary and the parent-HQ, calculated using Pearson's coefficient. The strongest correlation was observed between aggregated *centralization* with *Centralization* in HR and overall *Formalization* with Rules and policies ($r = 0.91$, $p < 0.01$).

There was a strong significant correlation between *Knowledge sharing* and *Organizational performance* ($r = 0.71$), also with *Organizational learning* ($r = 0.77$), with *Autonomy & freedom* (part of *Organizational learning*, $r = 0.71$) and overall *Formalization* ($r = 0.696$) and *Network strength* ($r = 0.73$), significantly moderately correlated with *Collaboration and team learning*, (part of *Organizational learning*, $r = 0.65$), with *Performance management* (part of *Organizational learning*, $r = 0.55$), with *Superior subsidiary knowledge*, (part of *Organizational learning*, $r = 0.68$), with *Knowledge creation* (part of *Organizational learning*, $r = 0.60$), with *Centralization* ($r = 0.57$), with *Centralization* in HR ($r = 0.63$), with *Rules & policy usage*, (part of *Organizational learning*, $r = 0.68$) and with *Subsidiary competence* ($r = 0.66$). However, knowledge sharing was weakly significantly correlated with *Centralization* in marketing ($r = 0.45$), manufacturing ($r = 0.38$) and finance ($r = 0.44$). Correlation above was statistically significant at $p < 0.01$. In studies by Crespo et al. (2014), knowledge outflow highly correlated with organizational performance, but weakly correlated with centralization and formalization. Luo and Bu (2017) also that stated autonomy was correlated with cross border knowledge sharing. Our results are supported by Jain and Moreno (2015) and Yu et al. (2013) with regard to parameters of *Organizational learning* and *Knowledge sharing*.

Organizational performance was strongly significantly correlated with *subsidiary competence* ($r = 0.71$), moderately significantly with overall *Organizational learning* ($r = 0.64$), *Superior subsidiary knowledge* (part of organizational learning, $r = 0.68$) and *Autonomy & freedom* (part of *Organizational learning*, $r = 0.69$), *Centralization* ($r = 0.57$), *Centralization*

in HR ($r = 0.65$), *Formalization* ($r = 0.62$), Rules & policy usage, $r = 0.50$, Normative integration, $r = 0.61$ and *Network strength* ($r = 0.57$), weakly significantly correlated with within *organizational learning* (Collaboration and team learning, $r = 0.49$; Knowledge creation, $r = 0.34$; and Performance management, $r = 0.49$), with *Centralization* in Marketing ($r = 0.37$), Manufacturing ($r = 0.37$) and Finance ($r = 0.39$). All the values for correlation except with knowledge creation ($p < 0.05$) was significant at $p < 0.01$ level. Similar correlation was observed by Khandekar and Sharma (2006) in *Organizational learning* and *Organizational performance*. Aragón et al. (2014), Argote (2015), Bititci et al. (2011), Lopez et al. (2004), and Yu et al. (2013) also supported that the organizational learning affects organizational performance. Similarly, centralization was a prime determinant of organizational effectiveness (Boseman & Jones, 1974; Egelhoff, 2010), adaptiveness (Blau & Schoenherr, 1971) and superior performance (Meyer et al., 2011). However, Luo and Bu (2017) and Young and Tavares (2004) reported in their review that there was a positive impact of autonomy or decentralization on the overall organizational performance.

However, our results differed from others. In literature, no correlation was observed between *Organizational performance* with *Knowledge sharing* (Lee et al., 2008) and *Network strength* (Lee et al., 2008). Low correlation with *Organizational performance* and *Formalization* (Crespo et al., 2014), and *Network strength* (Lee, 2010) were observed. *Centralization* had no (Ghoshal & Nohria, 1989) or low relation (Crespo et al., 2014) with *Organizational performance*.

| Variables | KS | OP | OL | CTL | PM | AF | KC | SSK | Cen. | HR | Mar. | Man. | Fin. | For. | R&P | NI | NS | SC |
|--|--------|--------|--------|-------|--------|--------|--------|-------|-------|--------|-------|------|------|------|-----|----|----|----|
| Knowledge Sharing (KS) | 1 | | | | | | | | | | | | | | | | | |
| Organizational performance (OP) | .717* | 1 | | | | | | | | | | | | | | | | |
| Organizational learning | .773** | .649** | 1 | | | | | | | | | | | | | | | |
| Collaboration & team learning (CTL) | .650** | .494** | .867** | 1 | | | | | | | | | | | | | | |
| Performance Management (PM) | .551** | .499** | .843** | .710* | 1 | | | | | | | | | | | | | |
| Autonomy & freedom (AF) | .719** | .690** | .851** | .656* | .639** | 1 | | | | | | | | | | | | |
| Knowledge creation (KC) | .606** | .346* | .773** | .667* | .531** | .508** | 1 | | | | | | | | | | | |
| Superior subsidiary knowledge (SSK) | .681** | .634** | .806** | .576* | .562** | .669** | .565** | 1 | | | | | | | | | | |
| Centralization (Cen.) | .573** | .544** | .488** | .348* | 0.256 | .427** | .349* | .677* | 1 | | | | | | | | | |
| Centralization in HR (HR) | .632** | .652** | .509** | .364* | 0.261 | .503** | .375** | .625* | .808* | 1 | | | | | | | | |
| Centralization in marketing (Mar.) | .455** | .370** | .345* | 0.254 | 0.215 | .333* | 0.237 | .399* | .686* | .411** | 1 | | | | | | | |
| Centralization in manufacturing (Man.) | .387** | .370** | .384** | 0.268 | 0.234 | .277* | 0.265 | .577* | .911* | .595** | .545* | 1 | | | | | | |

| Variables | KS | OP | OL | CTL | PM | AF | KC | SSK | Cen. | HR | Mar. | Man. | Fin. | For. | R&P | NI | NS | SC |
|----------------------------------|--------|--------|--------|-------|--------|--------|--------|-------|-------|--------|-------|-------|--------|--------|--------|--------|--------|----|
| Centralization in finance (Fin.) | .442** | .390** | .336* | 0.242 | 0.080 | .308* | 0.249 | .552* | .774* | .550** | .460* | .605* | 1 | | | | | |
| Formalization (For.) | .778** | .627** | .744** | .642* | .560** | .673** | .553** | .658* | .519* | .608** | .395* | .348* | .368** | 1 | | | | |
| Rules and policy usage (R & P) | .681** | .508** | .654** | .567* | .515** | .565** | .521** | .545* | .427* | .529** | .419* | 0.237 | .287* | .913** | 1 | | | |
| Normative integration (NI) | .696** | .614** | .662** | .567* | .468** | .633** | .446** | .628* | .500* | .548** | 0.257 | .399* | .375** | .844** | .552** | 1 | | |
| Network strength (NS) | .734** | .575** | .765** | .610* | .591** | .680** | .585** | .706* | .631* | .552** | .490* | .516* | .507** | .670** | .616** | .560** | 1 | |
| Subsidiary Competence (SC) | .666* | .710** | .671* | .485* | .531** | .643* | .371** | .740* | .688* | .671** | .447* | .596* | .452** | .573** | .422* | .616** | .667** | 1 |

* Correlation is significant at the 0.05 level (2-tailed), ** Correlation is significant at the 0.01 level (2-tailed)

Table 31 - Correlation matrix between the factors influencing internal relations between the parent-HQ and the subsidiary

Organizational learning overall was strongly correlated with Collaboration and team learning, $r = 0.86$, Performance management, $r = 0.84$; Autonomy & freedom, $r = 0.85$, Knowledge creation, $r = 0.77$, Superior subsidiary knowledge, $r=0.80$, *Formalization* ($r = 0.74$ and *Network strength*, $r = 0.76$); moderately significantly correlated with *Centralization* in HR ($r = 0.50$), *Formalization* (Rules & policy usage, $r = 0.65$ and Normative integration, $r = 0.66$) and *subsidiary competence* ($r=.67$) and weakly significantly correlated with *Centralization* ($r = 0.48$), *Centralization* in marketing ($r =0.34$), *Centralization* in manufacturing ($r = 0.38$), *Centralization* in finance ($r = 0.33$). All values are significant at $p<0.01$ except with *Centralization* in finance and marketing ($p<0.05$).

Within *Organizational learning*, Collaboration and team learning was significantly strongly correlated with Performance management aspect ($r = 0.71$), significantly moderately correlated with Autonomy and freedom ($r = 0.66$), Knowledge creation ($r = 0.67$) and Superior knowledge of the subsidiary ($r=0.57$) as a part of organizational learning; with *Formalization*($r=0.64$) and Rules & policy usage, $r = 0.56$ and Normative integration, $r = 0.56$); with *Network strength* ($r = 0.61$), weakly but significantly correlated to *Centralization* ($r = 0.34$), *Centralization* in HR ($r = 0.36$) and subsidiary competence ($r=0.48$). The correlation was significant at $p<0.01$ for all values mentioned above except *Centralization* ($p<0.05$). The second factor in *Organizational learning*, performance management was significantly moderately correlated with *Organizational learning* in terms of Autonomy and freedom ($r = 0.64$), superior subsidiary knowledge ($r= 0.56$) and Knowledge creation ($r = 0.53$), with subsidiary competence, ($r = 0.53$), with overall *Formalization*($r = 0.56$), Rules and policy usage, $r = 0.51$ and with *Network strength* ($r = 0.59$), weakly significantly correlated with and normative integration, $r = 0.47$. All the values for correlation was statistically significant at $p< 0.01$ level. However, there was no correlation with *Centralization*.

The third element of *Organizational learning*, autonomy and freedom was significantly moderately correlated with knowledge creation (part of *Organizational learning*, $r = 0.51$, $p < .01$), superior subsidiary knowledge (part of *Organizational learning*, $r = 0.66$), with subsidiary competence, $r = 0.64$, $p < .01$, with *Formalization* ($r=0.67$), Rules & policy usage, $r = 0.56$, $p < .01$ and Normative integration, $r = 0.63$, $p < .01$); with *Network strength* ($r= 0.68$, $p< .01$) and with *Centralization* in HR ($r = 0.50$, $p < .01$). Weak but significant correlation was observed

between Autonomy and freedom of *Organizational learning* and *Centralization* ($r = 0.42$, $p < 0.01$). *Centralization* in Marketing ($r = 0.33$, $p < .05$) and Finance ($r = .30$, $p < .05$).

Knowledge creation (part of *Organizational learning*) was moderately correlated with superior subsidiary knowledge (part of *Organizational learning*, $r = 0.56$), with *Formalization* ($r = 0.55$), rules and policy usage (part of *Formalization*, $r = 0.52$) and *Network strength* ($r = 0.58$). Weak but significant correlation was observed in knowledge creation and subsidiary competence ($r = 0.37$); Normative integration (part of *Formalization*, $r = 0.45$) and *Centralization* ($r = 0.34$) and *Centralization* in HR ($r = 0.37$). The Correlation was statistically significant ($p < 0.1$) except for centralization ($p < 0.05$).

The final component of *Organizational learning*, Superior knowledge of the subsidiary was strongly correlated to *Network strength* ($r = 0.70$) and Subsidiary competence, $r = 0.74$). Similarly, moderate, but significant correlation ($p < 0.01$) was observed between Superior knowledge of the subsidiary with other components of *Organizational learning* (Performance management, $r = 0.56$, Autonomy & freedom, $r = 0.67$ and Knowledge creation, $r = 0.56$), with *Formalization* ($r = 0.65$), Rules & policy usage, $r = 0.55$ and Normative integration, $r = 0.63$); with *Centralization* ($r = 0.67$), *Centralization* in HR ($r = 0.62$), Manufacturing ($r = 0.57$) and Finance ($r = 0.55$). There was a weak correlation between Superior subsidiary knowledge and *Centralization* in Marketing ($r = 0.39$). The correlation was statistically significant at $p < 0.01$ level. Overall *Organizational learning* was correlated with Knowledge management (Jain & Moreno, 2015). However, superior knowledge of the subsidiary was observed to be unrelated to knowledge management by Fey and Furu (2008).

Centralization was strongly significantly correlated to *Centralization* in HR ($r = 0.80$), *Centralization* in marketing ($r = 0.91$), *Centralization* in finance ($r = 0.77$), moderately significantly to *Formalization* ($r = 0.51$), Normative integration ($r = 0.50$), *Network strength* ($r = 0.63$) and *subsidiary competence* ($r = 0.68$), weakly significantly correlated to *Formalization* (Rules & policy usage, $r = 0.42$). *Centralization* in HR was significantly moderately correlated with *Centralization* in manufacturing ($r = 0.59$), finance ($r = 0.55$), *Formalization* ($r = 0.60$), *Formalization* (Rules & policy usage, $r = 0.52$ and Normative integration, $r = 0.54$), *Network strength* ($r = 0.55$) and subsidiary competence ($r = 0.67$); weakly with *Centralization* in marketing ($r = 0.41$). *Centralization* in marketing was moderately significantly correlated with

Centralization in manufacturing ($r = 0.54$) and weakly correlated with *Centralization* in finance ($r = 0.46$), Rules & policy usage, $r = 0.41$), *Network strength* ($r=0.49$) and subsidiary competence ($r= 0.44$). *Centralization* in manufacturing was moderately correlated with *Centralization* in finance ($r = 0.60$), *Network strength* ($r=0.51$) and *subsidiary competence* ($r=0.59$). *Centralization* in finance was moderately significantly correlated with *Network strength* ($r=0.50$) and weakly significantly with *Formalization* ($r=0.36$), Normative integration (part of *Formalization*, $r=0.37$) and *subsidiary competence* ($r=0.45$). The observed correlation was statistically significant at $p < 0.01$ level except for rules and policy usage ($p < 0.05$).

Formalization was strongly correlated to Rules & policy usage, $r = 0.91$ and Normative integration, $r = 0.84$), moderately significantly with *Network strength* ($r=0.67$) and subsidiary competence ($r=0.57$). All correlations were statistically significant at $p < 0.01$.

Rules and policy usage (part of *Formalization*) was significantly moderately correlated with Normative integration ($r = 0.55$), with *Network strength* ($r = 0.61$). Weak, but significant correlation was observed in rules and policies with *subsidiary competence* ($r = 0.42$). Overall, strong (Crespo et al., 2014), or weak (Ambos & Schlegelmilch, 2007; Menon et al., 1996) correlation was observed between *Formalization* and *Centralization*. The values for correlation were statistically significant at $p < 0.01$ level.

Normative integration (part of *Formalization*) was significantly moderately related to *Network strength* ($r = 0.56$) and *subsidiary competence* ($r = 0.61$). All the values for correlation was statistically significant at $p < 0.01$ level.

Similarly, a significant moderate correlation was observed between *Network strength* and *subsidiary competence* ($r = 0.66$). The correlation values were statistically significant at $p < 0.01$ level.

5.3.2. Hypothesis testing

Hypothesis testing allows us to carry out inferences about population parameters using data from a sample (Field, 2013). It is done through regression analysis, which is a mathematical measure of the average relationship between two or more variables in terms of the original units of the data. Even though correlation gives an idea about the extent of association within the variables, however, it is unable to tell about the cause about the association, therefore,

regression analysis was conducted to clearly indicate the cause and effect relationship between the variables. The variable corresponding to cause is taken as an independent variable and the variable corresponding to the effect is taken as the dependent variable. Thus, regression analysis is the relationship between dependent variable and independent variable.

The regression equation is represented as $y = a_0 + b_1 X$, where y is the dependent variable, a_0 is constant, b_1 is slope of the regression line, X is independent variable. Similarly, multiple regression is the relationship between dependent variable and more than one independent variable. The multiple regression equation can be denoted as $y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + u$. The hypotheses are accepted when the standardized co-efficient (β) is significant, i.e., the p-value is < 0.05 at 95% confidence level.

In our study, regression analysis was conducted between the five factors: Organizational learning, Subsidiary competence, Centralization, Formalization and Network strength were identified as the independent variables for Knowledge sharing (dependent variable). To further understand the overall influence of related to internal relations between subsidiary and parent HQ, knowledge sharing was tested with organizational performance.

| Sl. | Hypotheses |
|-----------|---|
| H1 | <i>Organizational learning is positively related to knowledge sharing.</i> |
| H2 | <i>Subsidiary competence is positively related to knowledge sharing.</i> |
| H3 | <i>Centralization is (positively) related to knowledge sharing.</i> |
| H4 | <i>Formalization is (positively) related to knowledge sharing.</i> |
| H5 | <i>Network strength is positively related to knowledge sharing.</i> |
| H6 | <i>Knowledge sharing is positively related to Organizational performance.</i> |

Table 32 - Hypotheses formulated

Hypothesis 1: Organizational learning is positively related to knowledge sharing.

Table 33 provides the summary of regression analysis between knowledge sharing (dependent variable) and organizational learning (independent variable). R represents the multiple correlation coefficient with a range lies between -1 and +1. Since the R value was 0.46, it means knowledge sharing has a positive relationship with organizational learning. R square

represents the coefficient of determination and ranges between 0 and 1. Since the R square value is 0.21, it implies that 21.4 % of the variation in knowledge sharing can be explained by Organizational learning with an F change value of 13.915 and $p = 0.00$. Adjusted R squared attempts to correct R squared to more closely reflect the goodness of fit of the model in the population. The adjusted R squared value of 0.199 in table 31 indicates that ideally 19.9 % of the variance was explained by the model. The regression model predicts the dependent variable significantly well.

Table 34 gives an overview on the coefficients of various factors of organizational learning studied. Only superior subsidiary knowledge and autonomy and freedom were found have a significant positive impact on knowledge sharing as the unstandardized beta value was 0.463. This value indicates that as organizational learning increases by one unit, knowledge sharing increase by 0.463 units.

As the overall level of significance was lower than 0.05, the alternate hypothesis were accepted instead of the null hypothesis, indicating that Organizational learning makes a significant difference in knowledge sharing. This has also been proven by Jain and Moreno (2015). In Indian context, there was also a similarity of our results with the results of Jain and Moreno (2015) of their studies on knowledge sharing and autonomy and freedom as a part of organizational learning in a public sector company, working in the field of power generation. In our study, development of superior knowledge of the subsidiary in all the studied divisions and autonomy and freedom was the reason behind the increased knowledge sharing.

| Model Summary | | | | | | | | | |
|---------------|------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .463 | .214 | .199 | .89501419 | .214 | 13.915 | 1 | 51 | .000 |

Table 33 - Model summary for influence of organizational learning on knowledge sharing of the subsidiaries

| Coefficients | | | | | | |
|--------------|--|-----------------------------|------------|---------------------------|-------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.652E-16 | .123 | | .000 | 1.000 |
| | Organizational learning (REGR factor score 1 for analysis 1) | .463 | .124 | .463 | 3.730 | .000 |

Table 34 - Coefficients for influence of organizational learning on organizational performance of the subsidiaries

Hypothesis 2: Subsidiary competence is positively related to knowledge sharing.

The subsidiary competence was found to have a significant ($p=.000$) influence on knowledge sharing (Table 35) with a correlation of 48.3% between them. Since the R^2 value is 0.234, subsidiary competence (independent variable) contributed to 23.4% variance in knowledge sharing (dependent variable). It had an F change value of 15.538, which was significant at $p = 0.000$. The adjusted R^2 value tells us that ideally 21.8% variance in knowledge sharing would be accounted for if the model had been derived from the population from which the sample was taken.

The positive influence was characterized by the unstandardized coefficient, $B = 0.483$ at $p = 0.000$ (Table 36). This value indicates that as subsidiary competence increases by one unit, knowledge sharing increases by 0.483 units. Therefore, it can be derived that H_2 : *Subsidiary competence is positively related to knowledge sharing*, was accepted. It can be deduced from our studies (Section 5.1.2 and 5.1.6) that the increased knowledge sharing is primarily due to the high competence shown by the sample subsidiaries. This has also been reported by Mudambi et al. (2014) and Noorderhaven and Harzing (2009). Fey and Furu (2008) considered the subsidiary's distinctive competence as a part of knowledge sharing. Moreover, Noorderhaven and Harzing (2009) suggested that subsidiaries with stronger competencies (similar to our study sample) plays the role of knowledge senders to both the parent headquarters and other subsidiaries within the organization.

| Model Summary | | | | | | | | | |
|---------------|------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .483 | .234 | .218 | .88403001 | .234 | 15.538 | 1 | 51 | .000 |

Table 35 - Model summary for the influence of subsidiary competence on knowledge sharing

| Coefficients | | | | | | |
|--------------|--|-----------------------------|------------|---------------------------|-------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.249E-16 | .121 | | .000 | 1.000 |
| | Subsidiary competence (REGR factor score 1 for analysis 1) | .483 | .123 | .483 | 3.942 | .000 |

Table 36 - Coefficients for the influence of subsidiary competence on knowledge sharing

Hypothesis 3: Centralization is (positively) related to knowledge sharing.

The results of linear regression performed to analyze the relationship between the Centralization and knowledge sharing demonstrated that it was highly significant ($p=0.000$). Thus, the alternate hypothesis, centralization have a significant impact on knowledge sharing, were accepted after rejecting the null hypothesis. Our results were corroborated by Edwards, Ahmad and Moss (2002), Foss and Pedersen (2002), and Puck et al. (2016), who reported that knowledge development significantly reduced the extent of control over foreign subsidiaries. They also suggested that that highly knowledgeable subsidiaries enjoy greater levels of autonomy. Gulev (2007) and Miao et al. (2011) also described that increase in centralization leads to less vertical knowledge, as also observed in our case. Inkpen and Tsang (2005) too stated decentralization causes increase in multiple knowledge connection as a part of the successful strategy.

Luo and Bu (2017) listed certain advantages with some level of autonomy in the subsidiaries. Autonomy offers subsidiaries with sufficient decision-making power, which enables them to flexibly and creatively perform the complex tasks of combining distinct competitive means in overseas competition (Egelhoff, 1991). It also increases the level of local adaptiveness (Jarillo & Martinez, 1990), authorizing managers to quickly respond to rapid changes in new products and competitive climate (Gates & Egelhoff, 1986), and enables the formation and diffusion of innovations that fit local markets (Ghoshal & Bartlett, 1988). Moreover, autonomy move the subsidiary to distances from where home-originated weaknesses

are unable to seep in, thereby eliminating impediments to conducting effective compositional competition (Luo & Bu, 2017). However, and Noorderhaven and Harzing (2009) empirically found that the knowledge transfer from and to parent is positively related to centralization (which is opposite of autonomy), whereas unrelated to knowledge transfer to and from other subsidiaries. Gupta and Govindrajana (2000) reported that centralization can enhance the knowledge flow within the organization as there are pre-existing communication channels between them (Crespo et al., 2014). Moreover, regression studies by Crespo et al. (2014) demonstrated a positive relation between centralization and knowledge sharing, which is contradictory to our results.

Centralization contributed to 22.6% of the variation in knowledge sharing, with 47.5% correlation and a F change value of 14.882 (Table 37). The adjusted R squared value of 0.211 indicates that ideally 21.1% of the variance was explained by the model. The unstandardized beta coefficient of Centralization was 0.475 ($p=0.000$) denoting that it had a positive impact on knowledge sharing (Table 38). This value indicates that as centralization increases by one unit, knowledge sharing increase by 0.475 units.

From our results on descriptive statistics on centralization (Section 5.1.3), subsidiary had more control than headquarters, with some suggestions incorporated from the headquarters. This was also reflected in the regression analysis between centralization and knowledge sharing. Studies of Miao et al. (2011) also support this, as decentralization in the subsidiary is crucial facilitator for knowledge buildup at the subsidiary level (which was also observed in our case, section 5.1.1 Superior subsidiary knowledge, subsidiaries with higher autonomy have an advantage of obtaining more unique and profitable knowledge through daily local market interactions in comparison to more centralized subsidiaries.

Therefore, with reducing dependence on headquarters for strategic resources, the HQ recommends implementation of control mechanisms to ensure their role in directing its subsidiaries, also observed by Doz and Prahalad (1981). Moreover, Gates and Egelhoff (1986) and Menon et al. (1996) also reported that certain areas such as manufacturing become more prone to conflict when intervened by the HQ. Menon et al. (1996), however, reported that any positive conflict can promote strategy development and knowledge sharing. Thus,

centralization increases the potential of dysfunctional conflict, leading to less knowledge sharing (Schotter & Beamish, 2011).

| Model Summary | | | | | | | | | |
|---------------|------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .475 | .226 | .211 | .88842065 | .226 | 14.882 | 1 | 51 | .000 |

Table 37 - Model summary for the influence of Centralization on knowledge sharing

| Coefficients | | | | | | |
|--------------|---|-----------------------------|------------|---------------------------|-------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.114E-16 | .122 | | .000 | 1.000 |
| | Centralization (REGR factor score 1 for analysis 1) | .475 | .123 | .475 | 3.858 | .000 |

Table 38 - Coefficients for the influence of Centralization on knowledge sharing

Hypothesis 4: Formalization is (positively) related to knowledge sharing.

The regression analysis revealed an overall positive and highly significant relationship between formalization and knowledge sharing at $p = 0.000$ (Table 39 & 40). About 25.4% of the total variation in knowledge sharing can be explained by formalization with an F change value of 17.339. There was a moderate level of correlation (50.4%) between formalization and knowledge sharing ($r = 0.504$). The adjusted R^2 value tells us that ideally 23.9% variance in knowledge sharing would be accounted for if the model had been derived from the population from which the sample was taken.

The regression equation fits very well with the data, as revealed by the results. The alternate hypothesis, Formalization significantly influenced knowledge sharing, was accepted.

Both the aspects of formalization, normative integration/socialization, where employees develop common expectations and shared values that promote like minded decision making (Nobel & Birkinshaw, 1998) with $B = 0.504$ had a positive significant impact on knowledge sharing. This value indicates that as formalization increases by one unit, knowledge sharing increases by 0.504 units. The subsidiaries are enhancing the information processing ability for organization and developing an underlying set of norms and values that can guide any decision-

making under conditions of uncertainty along with building the linkages between the HQ-subsubsidiary (Nobel & Birkinshaw, 1998). Even though, autonomous working can lead to the enhancement of functional conflict between the HQ and the subsidiary (Menon et al., 1996; Schotter & Beamish, 2011), however, our sample subsidiaries are balancing the act well as there is a high level of knowledge sharing between them. The rules and norms can be a part of knowledge sharing as well in our case. The headquarters applies specific standards and procedural control over the subsidiary but in a less participatory mode (Ambos & Schlegelmilch, 2007). On the contrary, Crespo et al. (2014) considered with increasing formalization, there is a decrease in knowledge sharing and outflow. This inhibits organizational performance (Crespo et al., 2014) by restricting flexibility within the organization (Persson, 2006), Moreover, formalization decreases the power of both the HQ and the subsidiary, also increasing higher interdependence (Ghoshal & Nohria, 1989). Wei et al. (2014) further added that there is better coordination and increased communication between divisions, thereby leading to increased knowledge sharing within the subsidiary when there formalization is low. Chung (2014) suggested that the formalization was not a vital predictor of knowledge transfer. This is conflicting with our results as we observed that increased formalization also shows enhanced knowledge sharing and eventually an increase in organizational performance in the chosen subsidiaries of our study. Thus, in our case, the subsidiaries followed an ‘integrative’ pit structure of HQ-subsubsidiary relation to high normative integration, following rules and procedures with low centralization (Ghoshal & Nohria, 1989).

| Model Summary | | | | | | | | | |
|---------------|------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .504 | .254 | .239 | .87230325 | .254 | 17.339 | 1 | 51 | .000 |

Table 39 - Model summary for the influence of Formalization on Organizational performance

| Coefficients ^a | | | | | | |
|---------------------------|--|-----------------------------|------------|---------------------------|-------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.421E-16 | .120 | | .000 | 1.000 |
| | Formalization (REGR factor score 1 for analysis 1) | .504 | .121 | .504 | 4.164 | .000 |

Table 40 - Coefficients for the influence of Formalization on Organizational performance

Hypothesis 5: Network strength is positively related to knowledge sharing.

The results of the linear regression performed to understand the relationship between Network strength and knowledge sharing was highly significant ($p=0.003$). Network strength contributed to 16.1% of the variation in knowledge sharing, with an F change value of 9.754 (Table 41). The adjusted R^2 value tells us that ideally 14.4% variance in knowledge sharing would be accounted for if the model had been derived from the population from which the sample was taken.

Network strength shared a significant positive relation with knowledge sharing as the unstandardized beta coefficient was 0.401 ($p=0.000$; Table 42). This value indicates that as network strength increases by one unit, knowledge sharing increases by 0.401 units. Here, the null hypothesis was rejected and subsequently alternate hypothesis, Network strength has significant impact on knowledge sharing is accepted. It has been observed that the quality of relations of HQ to the subsidiary is dependent on the network and the extent of embeddedness (Beugelsdijk et al., 2017). Our study is in agreement with many studies on networking where knowledge intensive linkages improved knowledge sharing and transfer (Figueiredo, 2011; Lee, 2010; Lee et al., 2008; Luo, 2003; Luo et al., 2004; Moyo et al., 2015; Schulz, 2003; Szulanski, 1996). Knowledge can be shared mostly among individuals and units such as subsidiaries (Moyo et al., 2015). This increases the network ties and strengthens knowledge transfer (Inkpen and Tsang, 2005). The creation of the network occurs through a path-dependent process (Andersson et al., 2002). Schulz (2003) validated that the knowledge inflow increases with the presence of informal relations within the peer subsidiaries. Andersson et al. (2002) believed that the units where the network strength is strongly is more capable of exchanging knowledge, and therefore, learning from one another is much easier. Moreover, the strength of

the network helps in dealing turbulent environment, which eventually improved organizational performance (Andersson et al., 2007; Inkpen & Tsang, 2005; Lee, 2010). However, Ciasbuschi et al. (2011), opposed this, thus, suggesting that during any product innovation and development process, a subsidiary may only source a limited amount of resources and competencies from other subsidiaries within the organization, thereby not benefitting the subsidiary performance.

| Model Summary | | | | | | | | | |
|---------------|------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .401 | .161 | .144 | .92515732 | .161 | 9.754 | 1 | 51 | .003 |

Table 41 - Model summary for the influence of Network strength on Organizational performance

| Coefficients ^a | | | | | | |
|---------------------------|---|-----------------------------|------------|---------------------------|-------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 5.990E-17 | .127 | | .000 | 1.000 |
| | Network strength (REGR factor score 1 for analysis 1) | .401 | .128 | .401 | 3.123 | .003 |

Table 42 - Coefficients for the influence of Network strength on Organizational performance

Hypothesis 6: Knowledge sharing is positively related to Organizational performance

Regression analysis was used to test the differences in Organizational performance and knowledge sharing. The associated model summary and coefficients are presented in Tables 43 and 44. It was predicted to be highly significant as the level of significance was lower than 0.05. The results of the regression indicated the Knowledge sharing explained 45.4 % of the variance in Organizational performance with a significant impact (p=0.000). The R value represents the simple correlation of 0.674. This indicates a moderate level of positive correlation between Knowledge sharing and Organizational performance (F = 39.363). The adjusted R squared value of 0.443 reveals that 44.3 % of the variance was explained by the model ideally. As the unstandardized Beta value for subsidiary competence was 0.674, it

indicates a positive significant impact on Organizational performance ($p=0.00$). This value indicates that as organizational learning increases by one unit, knowledge sharing increase by 0.674 units. In this case also, the regression model predicts Organizational performance significantly well with Knowledge sharing. The alternate hypothesis were accepted, rejecting the null hypothesis.

From these results, it can be suggested the knowledge transfer from the headquarters added to the high internal, inherent competence of the subsidiary enhanced the overall efficiency of the organization. Our results are corroborated by studies by Bresman et al. (1999), Chung et al. (2012), Crespo et al. (2014), Fey and Furu (2008), Figueiredo (2011), Inkpen and Tsang (2005), Lee et al. (2008), and Yu et al. (2013). Teigland, Fey and Brinkinshaw (2000) described that knowledge transfer was critical for organizational success. Fey and Furu (2008) emphasized that the knowledge sharing is also related to achievement of organizational goals. Moreover, the degree of knowledge transfer is dependent on the type of knowledge obtained, time when knowledge is shared (Fang, Guo-Liang, Shige & Beamish, 2010a) and the location of the subsidiary and the understanding between the subsidiary and its parent (Fey & Furu, 2008). Jain and Moreno (2015) reported that knowledge transfer within the organization was impossible without collaboration among the team members, similar to our results. Miao et al. (2011) emphasized that knowledge sharing was a crucial component of subsidiary growth. Crespo et al. (2014) empirically evaluated that knowledge transfer from subsidiary is positively associated with organizational performance. Abdullah and Liang (2013) also highlighted the use of sharing to minimize the differences between the subsidiary and the headquarters. This will help with optimal organizational performance and also create new strategies for developing upper edge over competitors.

| Model Summary | | | | | | | | | |
|---------------|------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .674 | .454 | .443 | .74624279 | .454 | 42.378 | 1 | 51 | .000 |

Table 43 - Model summary for the influence of Knowledge sharing on Organizational performance

| Coefficients ^a | | | | |
|---------------------------|-----------------------------|---------------------------|---|------|
| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |

| | | B | Std. Error | Beta | | |
|---|--|------------|------------|------|-------|-------|
| 1 | (Constant) | -1.737E-17 | .103 | | .000 | 1.000 |
| | Knowledge sharing (REGR factor score 1 for analysis 1) | .674 | .103 | .674 | 6.510 | .000 |

Table 44 - Coefficients for the influence of Knowledge sharing in Organizational performance

From the results of the hypothesis, it could be suggested that Knowledge sharing is influenced by the Organizational learning, Subsidiary competence, Centralization, Formalization, along with network strength. Moreover, knowledge sharing impacts organizational performance of the subsidiaries.

5.4. Summary

In conclusion, knowledge sharing is dependent on all the factors discussed above, such as organizational learning, subsidiary competence, centralization, formalization and network strength in varying degrees within the subsidiary and the HQ. Moreover, knowledge sharing also impacts organizational performance. Therefore, for overall superior organizational performance, the company managers should keep all these factors in mind.

6. Conclusions

The economy is a wholly owned subsidiary of the environment, not the reverse.

— Herman E. Daly

The internal relations between the subsidiary and the parent headquarters of multinational companies were studied, while keeping the following parameters in mind: Organizational learning, Knowledge sharing, Subsidiary competence, Centralization, Formalization, Network strength and organizational performance within the subsidiary.

There was a significant amount of organizational learning taking place in the subsidiary of both the chosen companies, corresponding to the maintenance of good internal relations between the parent HQ and its subsidiary. The majority of the respondents believed in learning through collaboration and teamwork, performance management, presence of an autonomy and freedom for learning and creation of substantial amount of knowledge. A superiority in the overall knowledge level of the subsidiary was observed. The employees acknowledged increased level of knowledge sharing, thereby demonstrating an improved management of knowledge in the subsidiaries chosen in our study. The competence level of the subsidiary was observed to be elevated in the aspects of general management, manufacturing, marketing, R&D, sales and service. Absence of complete centralization in the studied subsidiaries was observed as they themselves were responsible for most of the critical decisions regarding the subsidiary, with some recommendations from the HQ. Therefore, it can be summarized that there was some amount of autonomy involved in the subsidiaries. Overall, the amount of formalization followed in our case for both the subsidiaries was primarily on the higher side. Maximum number of employees conformed to adhering rules, policies and norms in varying levels. Most of them had frequently visited the headquarters and actually worked there. There was a positive perception about headquarters by the personnel working in the subsidiary. Strong network between the subsidiary and the parent was observed when the network strength was measured. Thus, the organization itself was seen as a set of differentiated networks with increased benefits. Organizational performance was considered as the parameter for understanding the contribution of the subsidiary and any problems faced by the subsidiary. There was an augmented level of

organizational performance in comparison to their major competitors, as observed by the employees of the selected subsidiaries.

Reliability testing of the individual factors for internal relations between Headquarters and subsidiary showed that all the factors were highly reliable with Cronbach value ranging from 0.672 (for Network strength) to 0.915 (for Organizational learning) with items ranging from 5 to 27.

Factor analysis conducted produced factor loadings ranging from 0.52 to 0.96 among all the factors studied. These factors together explained 42.8 % of the variability of the data in case of organizational learning, 59.67% for subsidiary competence and knowledge sharing, 87.72% for centralization, 55.32% for formalization, and 50.19% in the case of network strength and organizational performance.

Correlation studies between the factors proved that an organization (parent and subsidiary) are intertwined with each other by the different variables described above to a varying extent.

Regression analysis was conducted to test the hypotheses and determine whether factors studied (Organizational learning, Centralization, Formalization, subsidiary competence and Network strength) influenced knowledge sharing of the subsidiary. Further, it was tested whether knowledge sharing had an effect on organizational performance. All the alternate hypotheses framed were accepted, thereby implying that all these variables (Organizational learning, Centralization, Formalization, subsidiary competence and Network strength) relate to knowledge sharing. Further, knowledge sharing impacted organizational performance.

Our study demonstrates that the presence of organizational learning within the subsidiary, its competence, extent of centralization, level of formalization are positively related to knowledge sharing within the subsidiary and eventually related to the organizational performance of the subsidiary. It also recognizes the role of network strength in strengthening the subsidiary. Therefore, it can be concluded that all the objectives pertaining to the study were achieved.

6.1. Limitations and directions of future research

Even though this has been one of the pioneering contributions on the outlook involving multiple variables measuring the internal relations of subsidiary and parent HQ, every study has certain limitations. In this case, this study was restricted in the following aspects. Our sample size was less, pertaining to one subsidiary each from two MNCs only. The subsidiaries were both located and operational in Bangalore, India. Future research should include more companies with multiple subsidiaries. Our study was only inclusive to the subsidiary side of the relationship. The participants were local; therefore, the scope of the study got further limited. Ideally, it needs to be cross-checked with the parent/ HQ side as well as subsidiaries in other countries to understand the importance of national cultural distance. The study was limited to measuring the overall organizational learning, however, the type of learning already present and kind of knowledge shared with the parent was not discussed. There was no information collected on the type of knowledge transfer (horizontal and vertical flow) within the organization. Some measures were captured by single indicators/constructs.

More strategies that boost team learning to incorporate new products and innovations, so as to improve firm performance should be studied. Further research should be done to investigate resource management processes across firms, such as external resource acquisition, resource divesting, and also inter-firm collaboration. Although structural equation modelling is an accurate method to capture the whole domain of multi-item scale interaction. The gaps between current, previous and expected performances should be kept in mind while designing the questionnaire. Further investigations are urgently required to understand the process of control through centralization and formalization in the HQ and its crucial role in mediating variables on knowledge sharing and firm performance.

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8. Appendices

8.1. Appendix I- Survey

Company details

1. Number of years my subsidiary been part of the MNC:
 <2 yrs 2-4 yrs 5-6 yrs 7-8 yrs >8 yrs
2. My subsidiary engages in:
 Manufacturing Sales Service R&D Any other _____
3. Mode of entry: Acquisition Greenfield Other
4. Number of countries in which my company/MNC is operational:
 2-3 4-5 6-7 >7
5. Origin of the parent company: _____

Information about staffing composition

6. Total number of employees working in my subsidiary:
 <500 500-1000 1001-1500 >1500
7. Your nationality: Are you a Local From the parent company Other country

Relations with the parent company

8. Please select the suitable option:

SDA – Strongly disagree; DA – Disagree; N – Neutral; A – Agree; SA – Strongly agree

| Sl. | Statement | SDA | DA | N | A | SA |
|-----|---|-----|----|---|---|----|
| 1. | In my division, people help each other to learn. | | | | | |
| 2. | In my division, people treat each other with respect. | | | | | |
| 3. | In my division, people treat each other with respect | | | | | |

| | | | | | | |
|----|---|--|--|--|--|--|
| 4. | In my division, people spend time building trust with each other. | | | | | |
| 5. | In my division, whenever people state their views, they also ask what others think. | | | | | |
| 6. | In my division, teams/groups revise their thinking as a result of group discussions or information collected. | | | | | |
| 7. | In my division, people spend time building trust with each other | | | | | |

9. Please select the suitable option:

| Sl. | Statement | SDA | DA | N | A | SA |
|-----|---|-----|----|---|---|----|
| 1. | My division makes its lessons learnt available to all employees. | | | | | |
| 2. | My division measures the results of the time and resources spent on training. | | | | | |
| 3. | My division measures the results of the time and resources spent on training. | | | | | |
| 4. | My division encourages people to get answers from across the organization when solving problems. | | | | | |
| 5. | My division encourages everyone to bring the customer's views into the decision making process. | | | | | |
| 6. | In my division, leader mentors and coaches those he or she leads. | | | | | |
| 7. | In my division, leader mentors and coaches those he or she leads. | | | | | |
| 8. | In my division, people are encouraged to ask "why" regardless of rank. | | | | | |
| 9. | In my division, teams/groups treat members as equals, regardless of rank, culture or other differences. | | | | | |
| 10. | In my division, the percentage of knowledge workers is greater than last year Is this the original statement? | | | | | |
| 11. | In my division, the number of individuals learning new skills is greater than last year. | | | | | |
| 12. | In my division, the number of individuals learning new skills is greater than last year. | | | | | |
| 13. | In my division, no. of suggestions implemented is greater than last year | | | | | |
| 14. | Employees take responsibility for their own learning | | | | | |

10. Please select the suitable option- My subsidiary has developed knowledge, that is superior, compared to that of the other units in the business area:

| Sl | Statement | Very Low | Low | Average | High | Very high |
|----|--------------------|----------|-----|---------|------|-----------|
| 1. | General management | | | | | |
| 2. | Manufacturing | | | | | |
| 3. | Marketing | | | | | |
| 4. | Sales | | | | | |
| 5. | Service | | | | | |
| 6. | R&D | | | | | |

11. The rate of the extent of the subsidiary's distinctive competence in the following areas/functions used and shared with other units within the corporation:

| Sl. | Statement | Very Low | Low | Average | High | Very high |
|-----|--------------------|----------|-----|---------|------|-----------|
| 1. | General management | | | | | |
| 2. | Manufacturing | | | | | |
| 3. | Marketing | | | | | |
| 4. | Sales | | | | | |
| 5. | Service | | | | | |
| 6. | R&D | | | | | |

12. Please select the suitable option on knowledge sharing and its transfer:

| Sl. | Statement | Very Low | Low | Average | High | Very high |
|-----|--|----------|-----|---------|------|-----------|
| 1. | The organization encourages and facilitates knowledge sharing. | | | | | |
| 2. | Information and knowledge transfer between the headquarters and this subsidiary related to customers of the host country is..... | | | | | |
| 3. | Information and knowledge transfer between the headquarters and this subsidiary related to competitors of the host country is | | | | | |
| 4. | Information and knowledge transfer between the headquarters and this subsidiary related to the needs and preferences of the host country is | | | | | |
| 5. | Information and knowledge transfer between the headquarters and this subsidiary related to marketing actions and strategy of the host country's competitors is | | | | | |

13. Please select the suitable option:

Who makes decisions for the following in my organization:

| Sl. | Statement | HQ decides alone | HQ decides, subsidiary suggests | Both decide | Subsidiary decides, HQ suggests | Subsidiary decides alone |
|-----|---|------------------|---------------------------------|-------------|---------------------------------|--------------------------|
| 1. | Introduction and development of a new product. | | | | | |
| 2. | Changes in product design. | | | | | |
| 3. | Changes in manufacturing process. | | | | | |
| 4. | Career development plans for senior managers | | | | | |
| 5. | Budget, finance, and investment | | | | | |
| 6. | Employee recruitment, compensation, promotion, and layoffs. | | | | | |
| 7. | Production expansion and market promotion. | | | | | |

14. Please select the suitable option involving formalization:

| Sl. | Statement | SDA | DA | N | A | SA |
|-----|---|-----|----|---|---|----|
| 1. | For most tasks, the headquarters have provided a fairly well-defined set of rules and policies; | | | | | |
| 2. | To the extent possible there are manuals that define the courses of action to be taken under different situations | | | | | |
| 3. | Headquarters continuously monitors to ensure that rules and policies are not violated | | | | | |
| 4. | My company follows various technical standards | | | | | |
| 5. | My company submits standardized reports to the HQ | | | | | |

15. Please select the suitable option on understanding the norms of the headquarters:

| Sl. | Statement | Very Low | Low | Average | High | Very high |
|-----|--|----------|-----|---------|------|-----------|
| 1. | Extent of time the respondent actually worked in the headquarters. | | | | | |

| | | | | | | |
|----|---|--|--|--|--|--|
| 2. | Perceptions of having a mentor at the headquarters, positive responses. | | | | | |
| 3. | The number of headquarters visits per year. | | | | | |

16. Please select the suitable option on network strength:

| Sl. | Statement | SDA | DA | N | A | SA |
|-----|---|-----|----|---|---|----|
| 1. | There is very little interaction between our units. | | | | | |
| 2. | Relations among our foreign units are very close. | | | | | |
| 3. | Our foreign units discuss common problems frequently. | | | | | |
| 4. | Our foreign units share frequent communications. | | | | | |
| 5. | Our foreign units share close ties among themselves. | | | | | |

17. Please select the suitable option on the level of firm performance compared to other major competitors in the last three years in terms of:

| Sl. | Statement | Very Low | Low | Average | High | Very high |
|-----|----------------------------------|----------|-----|---------|------|-----------|
| 1. | Market share | | | | | |
| 2. | Sales growth | | | | | |
| 3. | Return on assets | | | | | |
| 4. | Overall product/ service quality | | | | | |
| 5. | Overall profitability | | | | | |
| 6. | Customer satisfaction | | | | | |

8.2. Appendix II- Correlation matrix

Table 45 to 51 shows the correlation matrices obtained for various factors studied for understanding the internal relations between the subsidiary and the headquarters.

Organizational learning

CT1: In my division, people help each other to learn. CT2: In my division, people treat each other with respect. CT3: In my division, whenever people state their views, they also ask what others think. CT4: In my division, people spend time building trust with each other. CT5: In my division people openly discuss mistakes in order to learn from them. CT6: In my division, teams/groups revise their thinking as a result of group discussions or information collected. CT7: My division enables people to get needed information at any time quickly and easily.

PM1: My division makes its lessons learnt available to all employees. PM2: My division measures the results of the time and resources spent on training. PM3: My division maintains

an up to date database of employee skills. PM4: My division encourages people to get answers from across the organization when solving problems.

| | CT1 | CT2 | CT3 | CT4 | CT5 | CT6 | CT7 | PM1 | PM2 | PM3 | PM4 | PM5 | AF1 | AF2 | AF3 | AF4 | KC1 | KC2 | KC3 | KC4 | KC5 | SK1 | SK2 | SK3 | SK4 | SK5 | SK6 |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|--------|--------|-------|---------|---------|--------|--------|---------|-----|
| CT1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CT2 | 0.53*** | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CT3 | 0.25* | 0.25* | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| CT4 | 0 | 0.34** | 0.28* | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| CT5 | 0.18 | 0.31* | 0.2 | 0.21 | 1 | | | | | | | | | | | | | | | | | | | | | | |
| CT6 | 0.17 | 0.22 | 0.28* | 0.25* | 0.37** | 1 | | | | | | | | | | | | | | | | | | | | | |
| CT7 | 0.4* | 0.34** | 0.44*** | 0.29* | 0.43*** | 0.54*** | 1 | | | | | | | | | | | | | | | | | | | | |
| PM1 | 0.43** | 0.42*** | 0.47*** | 0.45*** | 0.41*** | 0.33** | 0.55*** | 1 | | | | | | | | | | | | | | | | | | | |
| PM2 | 0.26* | 0.41*** | 0.3* | 0.29* | 0.26* | 0.37** | 0.43*** | 0.64*** | 1 | | | | | | | | | | | | | | | | | | |
| PM3 | 0.42*** | 0.4** | 0.04 | 0.31* | 0.34** | 0.26* | 0.53*** | 0.36** | 0.45*** | 1 | | | | | | | | | | | | | | | | | |
| PM4 | -0.2 | 0.29* | 0.01 | 0.48*** | 0.41*** | 0.31* | 0.2 | 0.28* | 0.34** | 0.37** | 1 | | | | | | | | | | | | | | | | |
| PM5 | 0.07 | 0.28* | 0.22 | 0.3* | 0.39** | 0.4*** | 0.33** | 0.29** | 0.34** | 0.40*** | 0.39** | 1 | | | | | | | | | | | | | | | |
| AF1 | 0.16 | 0.34** | 0.31* | 0.3* | 0.18 | 0.31* | 0.27* | 0.42*** | 0.28* | 0.15 | 0.28* | 0.53*** | 1 | | | | | | | | | | | | | | |
| AF2 | 0.45*** | 0.36** | 0.52*** | 0.41*** | 0.31* | 0.19 | 0.38** | 0.54*** | 0.4*** | 0.32** | 0.27* | 0.45*** | 0.5*** | 1 | | | | | | | | | | | | | |
| AF3 | 0.01 | 0.17 | 0.4*** | 0.38** | 0.34** | 0.41*** | 0.53*** | 0.36** | 0.32** | 0.24* | 0.45*** | 0.28* | 0.36** | 0.47*** | 1 | | | | | | | | | | | | |
| AF4 | -0.03 | 0.29* | 0.26* | 0.42*** | 0.15 | 0.18 | 0.4** | 0.31* | 0.3* | 0.3* | 0.61*** | 0.28* | 0.25* | 0.34** | 0.66*** | 1 | | | | | | | | | | | |
| KC1 | 0.27* | 0.48*** | 0.36** | 0.32** | 0.21 | 0.13 | 0.3* | 0.27* | 0.34** | 0.2 | 0.13 | 0.32** | 0.11 | 0.18** | 0.06 | 0.22 | 1 | | | | | | | | | | |
| KC2 | 0.29* | 0.38** | 0.27* | 0.15 | 0.45*** | 0.29* | 0.23* | 0.29* | 0.23* | 0.26* | 0.15 | 0.41*** | 0.25* | 0.42*** | 0.21 | 0.07 | 0.28* | 1 | | | | | | | | | |
| KC3 | 0.29* | 0.43*** | 0.27* | 0.29* | 0.41*** | 0.44*** | 0.31* | 0.5*** | 0.29* | 0.22 | 0.31* | 0.4*** | 0.46*** | 0.50*** | 0.27* | 0.17 | 0.23* | 0.61*** | 1 | | | | | | | | |
| KC4 | 0.27* | 0.28* | -0.05 | 0.1 | 0.42*** | 0.21 | 0.42*** | 0.36** | 0.17 | 0.31* | 0.13 | 0.21 | 0.15 | 0.08 | 0.16 | 0.03 | 0.18 | 0.36** | 0.38** | 1 | | | | | | | |
| KC5 | 0.16 | 0.38** | 0.16 | 0.25* | 0.14 | 0.13 | 0.28* | 0.21 | 0.27* | 0.31* | 0.22 | 0.13 | 0.21 | 0.27* | 0.27* | 0.46*** | 0.2 | 0.32** | 0.21 | 0.2 | 1 | | | | | | |
| SK1 | 0.14 | 0.33** | 0.52*** | 0.49*** | 0.31* | 0.07 | 0.36** | 0.46*** | 0.24* | 0.13 | 0.22 | 0.09 | 0.39** | 0.44*** | 0.46*** | 0.27* | 0.15 | 0.32** | 0.37** | 0.3* | 0.24* | 1 | | | | | |
| SK2 | -0.09 | 0.06 | -0.01 | 0.14 | 0.28* | 0.1 | 0.2 | 0.04 | 0.03 | 0.16 | 0.27* | 0.11 | 0.23 | 0.01 | 0.21 | 0.17 | 0 | 0.2 | 0.26* | 0.37** | 0.24* | 0.43*** | 1 | | | | |
| SK3 | 0.2 | 0.33** | 0.26* | 0.26* | 0.36** | 0.03 | 0.32** | 0.21 | 0.27* | 0.28* | 0.33** | 0.08 | 0.07 | 0.28* | 0.36** | 0.46*** | 0.33** | 0.14 | 0.16 | 0.25* | 0.4** | 0.43*** | 0.54*** | 1 | | | |
| SK4 | -0.05 | 0.11 | 0.21 | 0.38** | 0.25* | 0.17 | 0.25* | 0.2 | 0.48*** | 0.22 | 0.38** | 0.34** | 0.29* | 0.32** | 0.29* | 0.36** | 0.34** | 0.4*** | 0.31* | 0.04 | 0.27* | 0.2 | 0.28* | 0.33** | 1 | | |
| SK5 | -0.08 | -0.01 | 0.28* | 0.33** | 0.3* | 0.37** | 0.3* | 0.23 | 0.32* | 0.17 | 0.23 | 0.33** | 0.21 | 0.43*** | 0.54*** | 0.34** | 0.08 | 0.19 | 0.33** | 0.06 | 0.12 | 0.22 | 0.01 | 0.08 | 0.34** | 1 | |
| SK6 | 0.18 | 0.39** | 0.25 | 0.31* | 0.14 | 0.3* | 0.36** | 0.51*** | 0.45*** | 0.27* | 0.24* | 0.33** | 0.63*** | 0.53*** | 0.32** | 0.2 | 0.07 | 0.33** | 0.5*** | 0.07 | 0.21 | 0.37** | 0.1 | 0.03 | 0.38** | 0.41*** | 1 |

*p≤0.05; **p≤0.01; ***p≤0.001

Table 45 - Correlation matrix with the items that compose organizational learning

AF1: My division encourages everyone to bring the customer’s views into the decision making process. AF2: In my division, leader mentors and coaches those he or she leads. AF3: In my division, teams/groups treat members as equals, regardless of rank, culture or other differences. AF4: In my division, people are encouraged to ask “why” regardless of rank. AF5: In my division, leaders continually look for opportunities to learn.

KC1: In my division, the percentage of knowledge workers is greater than last year. KC2: In my division, the number of individuals learning new skills is greater than last year. KC3: In my division, the percentage of total spending devoted to technology, R&D and information processing is greater than last year. KC4: In my division, no. of suggestions implemented is greater than last year. KC5: Employees take responsibility for their own learning.

SK1: General management, SK2: Manufacturing, SK3: Marketing, SK4: Sales, SK5: Service, SK6: R & D.

Subsidiary competence

| Subsidiary competence in | General management | Manufacturing | Marketing | Sales | Services | R&D |
|--------------------------|--------------------|---------------|-----------|---------|----------|-----|
| General management | 1 | | | | | |
| Manufacturing | 0.48*** | 1 | | | | |
| Marketing | 0.54*** | 0.62*** | 1 | | | |
| Sales | 0.48*** | 0.38** | 0.47*** | 1 | | |
| Services | 0.39*** | 0.38** | 0.43*** | 0.58*** | 1 | |
| R&D | 0.21 | 0.08 | 0.2 | 0.3* | 0.49*** | 1 |

*p≤05; **p≤01; ***p≤0.001

Table 46 - Correlation matrix with the items that compose subsidiary competence

Knowledge sharing

| | KS1 | KS2 | KS3 | KS4 | KS5 |
|-----|---------|---------|---------|---------|-----|
| KS1 | 1 | | | | |
| KS2 | 0.55*** | 1 | | | |
| KS3 | 0.48*** | 0.41*** | 1 | | |
| KS4 | 0.22 | -0.02 | 0.27* | 1 | |
| KS5 | 0.44*** | 0.32** | 0.49*** | 0.49*** | 1 |

*p≤05; **p≤01; ***p≤0.001

Table 47 - Correlation matrix with the items that compose Knowledge sharing

KS1: The organization encourages and facilitates knowledge sharing.

KS2: Information and knowledge transfer between the headquarters and this subsidiary related to customers of the host country is.....

KS3: Information and knowledge transfer between the headquarters and this subsidiary related to competitors of the host country is.....

KS4: Information and knowledge transfer between the headquarters and this subsidiary related to the needs and preferences of the host country is.....

KS5: Information and knowledge transfer between the headquarters and this subsidiary related to marketing actions and strategy of the host country's competitors is.....

Formalization

| | FORM1 | FORM2 | FORM3 | FORM4 | FORM5 | FORM6 | FORM7 | FORM8 |
|-------|--------|--------|---------|---------|--------|---------|---------|-------|
| FORM1 | 1 | | | | | | | |
| FORM2 | 0.3* | 1 | | | | | | |
| FORM3 | 0.19 | 0.26* | 1 | | | | | |
| FORM4 | 0.13 | 0.22 | 0.37** | 1 | | | | |
| FORM5 | 0.3* | 0.22 | 0.36** | 0.51*** | 1 | | | |
| FORM6 | 0.33** | 0.18 | 0.44*** | 0.18 | 0.32** | 1 | | |
| FORM7 | 0.17 | 0.16 | 0.42*** | 0.5*** | 0.37** | 0.61*** | 1 | |
| FORM8 | 0.21 | 0.37** | 0.36** | 0.3* | 0.27* | 0.59*** | 0.57*** | 1 |

*p≤05; **p≤01; ***p≤0.001

Table 48 - Correlation matrix with the items that compose Formalization

FORM1: For most tasks, the headquarters has provided a fairly well-defined set of rules and policies;

FORM2: To the extent possible there are manuals that define the courses of action to be taken under different situations.

FORM3: Headquarters continuously monitors to ensure that rules and policies are not violated.

FORM4: My company follows various technical standards.

FORM5: My company submits standardized reports to the HQ.

FORM6: Extent of time the respondent actually worked in the headquarters.

FORM7: Perception of having a mentor at the headquarters, positive responses.

FORM8: The number of headquarters visits per year.

Network strength

| | There is very little interaction between our units. | Relations among our foreign units are very close. | Our foreign units discuss common problems frequently. | Our foreign units share frequent communications. | Our foreign units share close ties among themselves. |
|---|---|---|---|--|--|
| There is very little interaction between our units. | 1 | | | | |
| Relations among our foreign units are very close. | 0.43*** | 1 | | | |
| Our foreign units discuss common problems frequently. | 0.25* | 0.27* | 1 | | |
| Our foreign units share frequent communications. | 0.08 | 0.21 | 0.38** | 1 | |
| Our foreign units share close ties among themselves. | 0.1 | 0.35** | 0.39** | 0.52*** | 1 |

*p≤05; **p≤01; ***p≤0.001

Table 49 - Correlation matrix with the items that compose Network strength

Organizational Performance

| | Market share | Sales growth | Return of assets | Overall product/service quality | Overall profitability | Customer satisfaction |
|---------------------------------|--------------|--------------|------------------|---------------------------------|-----------------------|-----------------------|
| Market share | 1 | | | | | |
| Sales growth | 0.35** | 1 | | | | |
| Return of assets | 0.29* | 0.48*** | 1 | | | |
| Overall product/service quality | 0.24* | 0.45*** | 0.37** | 1 | | |
| Overall profitability | 0.47*** | 0.48*** | 0.37** | 0.3* | 1 | |
| Customer satisfaction | 0.14 | 0.27* | 0.14 | 0.34** | 0.44*** | 1 |

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Table 50 - Correlation matrix with the items that compose Organizational performance Centralization

| | Introduction and development of a new product. | Changes in product design. | Changes in manufacturing process. | Career development plans for senior managers | Budget, finance, and investment | Employee recruitment, compensation, promotion, and layoffs. | Production expansion and market promotion. |
|---|--|----------------------------|-----------------------------------|--|---------------------------------|---|--|
| Introduction and development of a new product. | 1 | | | | | | |
| Changes in product design. | 0.61*** | 1 | | | | | |
| Changes in manufacturing process. | 0.39** | 0.64*** | 1 | | | | |
| Career development plans for senior managers. | 0.41*** | 0.44*** | 0.40** | 1 | | | |
| Budget, finance, and investment | 0.49*** | 0.5*** | 0.53*** | 0.40*** | 1 | | |
| Employee recruitment, compensation, promotion, and layoffs. | 0.27* | 0.48*** | 0.47*** | 0.40*** | 0.52*** | 1 | |
| Production expansion and market promotion. | 0.34** | 0.56*** | 0.45*** | 0.31* | 0.46*** | 0.38** | 1 |

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Table 51 - Correlation matrix with the items that compose Centralization