## **CHAPTER 3**

## RESEARCH OBJECTIVES AND HYPOTHESES

This chapter presents the discussion of research questions and objectives that have laid the foundation of the conceptual model developed to identify the research parameters and address the knowledge gap identified by the researcher. Additionally, hypotheses are generated logically for the purpose of empirical validation. The antecedent-consequence linkage of innovation adoption has not been empirically verified extensively. The conceptual model developed in this study is comprehensive which is not much researched in an SME context. Further, in the context of SME intensive Indian industrial clusters, highly limited literature that deals with innovation adoption exists till date. It is also noteworthy that this study is the first of its kind in the knitwear cluster of Tirupur district.

### 3.1 GENERATION OF RESEARCH QUESTIONS

To address the research gaps identified in literature and answer the assumptions in the theoretical model, the following research questions have been proposed for the purpose of the present study:

- What is the impact of innovation objectives on innovation adoption among the SMEs in the knitwear cluster of Tirupur district?
- How do the facilitators influence and predict the innovativeness of these firms?
- How can barriers impact and predict the innovativeness of these firms?
- How will the interrelationship between the objectives, facilitators and barriers of innovation impact and predict the extent of adoption of innovations?
- Does the adoption of innovation predict business performance of these SMEs?

• Will implementation of innovation moderate the impact of innovation adoption on business performance?

#### 3.2 OBJECTIVES OF THE STUDY

The primary objective of this research is to conceptually develop and empirically test a hypothesized model that depicts the relationship between the objectives, facilitators and barriers (pre-adoption variables), innovation adoption and the subsequent consequences (post adoption outcomes) of innovation adoption in the form of business performance with respect to the SMEs operating in the knitwear cluster of Tirupur district.

The secondary objectives of the study are

- To identify the key objectives of the SMEs while adopting innovations
- To understand the significant facilitators of innovation, internal and external to these firms
- To investigate the major barriers that hinders innovation adoption among the SMEs
- To understand the influence of objectives, facilitators and barriers on innovation adoption separately
- To study the combined effect of the pre adoption variables on the propensity to adopt innovations
- To understand innovation adoption status of SMEs in the cluster
- To examine the type of innovation mostly adopted by the SMEs
- To evaluate the extent of innovation implementation among the SMEs and its impact on business performance
- To measure the impact of innovation adoption in terms of SMEs' business performance reflected in financial as well as market performance

- To investigate the mediating role of innovation adoption between the independent variables and business performance
- To investigate the moderating role of innovation implementation between innovation adoption and business performance
- To examine the business performance status of the SMEs in the cluster
- To investigate the association of demographic aspects of the SMEs with innovation adoption
- To investigate the association of demographic aspects of the SMEs with business performance
- To offer suggestions based on the significant findings of the study

#### 3.3 GENERATION OF HYPOTHESES

The research questions, proposed hypothesized model and the objectives framed for the study broadly explains the possible relationships between the important constructs identified in the study. To confirm these relationships, theoretical evidences are sought based on which the hypothetical relationships can be developed in a cause effect manner. Within each of the broad constructs-innovation objectives, facilitators, barriers, innovation adoption, implementation and business performance, a number of variables have been identified and hypotheses have been individually framed for each of them.

#### 3.3.1 Relationship between Innovation Objectives and Innovation Adoption

Hypothesis 1 has been decided to understand the degree of importance firms place on innovation and their specific impact on innovation adoption in general, and technological (product and process), administrative and marketing innovation adoption specifically. Given the inherent risk of innovation activities, firms can improve odds of success through innovation adoption by pursuing multiple innovation objectives at the same time. It has also been hypothesized and proved that higher level of innovation objectives, leads to higher rate of innovation adoption (Leiponen and Helfat 2005). Firm's propensity to adopt innovation is measured by

the rate or frequency of adoption of innovations. Innovation objectives can predict innovation adoption and hence the null and alternate hypotheses are framed as below:

- H1<sub>0</sub>: Innovation objectives decided by the respondent entrepreneurs will not have impact on firms' propensity to adopt innovations
- H1<sub>a</sub>: Innovation objectives decided by the respondent entrepreneurs will have a positive impact on firms' propensity to adopt innovations

#### 3.3.2 Facilitators of Innovation Adoption

The facilitators or drivers of innovation refer to those factors that promote innovation adoption in an organization. The facilitators have been identified after careful literature survey. A preliminary discussion was also made with experts in the industry. The facilitators are broadly classified into internal and external facilitators. Internal facilitators are those that exist within the context of the firm, while the external facilitators are those, that exist in the environment or the eco system surrounding the firm.

## 3.3.3 Relationship between Leadership and Innovation Adoption

Innovation studies in the past have largely advocated the paramount role played by the leaders in influencing organization's orientation towards innovation. Innovation conducive leadership labelled as 'transformational leadership' has also been associated with innovative organization climate in many studies (Jung, Chow and Wu 2004). Dunegan et al (1992) conducted a cross-sectional field study with 198 members of an international chemical company. They found that leadership significantly predicted employee perceptions of climate factors believed to foster innovative activities. In their study on 408 firms in four sectors in Spain, Aragón-Correa et al (2007) found that leadership had a significant positive influence on innovation. Shah et al also argued that transformational leadership is positively related with organizational commitment, innovativeness, and empowerment (2011). Accordingly, these findings imply that leadership, mostly transformational in nature, can predict innovativeness of firms. Hence, the hypotheses are framed in this regard as follows:

- H2<sub>0</sub>: Leadership of the respondent entrepreneurs will not have impact on firms' propensity to adopt innovations
- H2<sub>a</sub>: Leadership of the respondent entrepreneurs will have a positive impact on firms' propensity to adopt innovations

# 3.3.4 Relationship between Organizational Climate for Innovation and Innovation Adoption

Organizational climate supporting innovation was found to be a predictor of innovation adoption by many researchers. Burningham and West (1995) in their study on 59 members of 13 teams in an oil company found that team climate for innovation was a consistent predictor of innovation in the organization. Herting (2002) studied the correlation between trust related innovation climate and innovation adoption in 10 California hospitals. He found that the presence of certain key elements of trust within organizational climates could function as predictors of successful innovation adoption. Baer and Frese (2003) in their study on 47 midsized German firms found that new organizational attempts for process innovations need to be accompanied by a supportive organizational climate. In view of these findings, it can be concluded that supportive climate for innovation can predict the extent of innovativeness of firms. This argument leads to the next set of hypotheses as below:

- H3<sub>0</sub>: Organizational climate for innovations will not have impact on firms' propensity to adopt innovations
- H3<sub>a</sub>: Organizational climate for innovations will have a positive impact on firms' propensity to adopt innovations

#### 3.3.5 Relationship between Market Orientation and Innovation Adoption

Jaworski and Kohli (1993) stressed that market orientation and innovativeness are related to each other. Atuahene-Gima (1996) investigated the relationship between market orientation and innovation in 158 manufacturing and 117 services firms in Australia. The results indicated that market orientation had significant relationships with innovation and thereby on performance. Being oriented towards market provides firms with ideas for change and improvements. Market orientation is a necessary antecedent of innovativeness

(Hurley and Hult 1998). Erdil et al (2004) investigated this linkage on a sample of industrial firms in the Marmara Region and concluded that market orientation has a significant positive influence on innovativeness of firms. These premises lead us to conclude that market orientation is an important predictor of innovation adoption. Thus, hypotheses are generated as follows:

H4<sub>0</sub>: Market orientation will not have impact on firms' propensity to adopt innovations

H4<sub>a</sub>: Market orientation will have a positive impact on firms' propensity to adopt innovations

# 3.3.6 Relationship between Organizational Structure and Innovation Adoption

Organisations can have different structures that determine several aspects such as the diffusion of authority, the complexity of the task structure, incentive systems and the like. Burns and Stalker (1961) observed that different organizational structures might be effective in different situations. According to them, there can be two extreme types of organisational structures namely, the mechanistic structure and the organic structure. An organic structure that is less rigid and more challenging supports creativity and innovation. Past research has argued that organizational structure is the primary driver of innovation (Wolfe 1994). Structure provides the formal, internal context that is required for successful innovation adoption (Russell 1990). Decentralization has been found to be significantly correlated with innovation in a number of studies. Hence, we may conclude that a flexible and more open organization structure will provide a conducive atmosphere for innovations to occur. This leads to the hypotheses as below:

H5<sub>0</sub>: Organizational structure will not have impact on firms' propensity to adopt innovations

H5<sub>a</sub>: Organizational structure will have a positive impact on firms' propensity to adopt innovations

### 3.3.7 Relationship between Focus on R&D and Innovation Adoption

Mairesse and Mohnen (2004) in their study on French manufacturing firms concluded that R&D was positively correlated with innovation. They also found that innovation was more sensitive to R&D in the low-tech sectors than in the high-tech sectors. Hojnik et al (2011) examined the extent of outsourcing of R&D by the SMEs of Slovenia. They observed that majority of the firms outsourced R&D due to their inherent difficulty to perform the same internally. Total R&D expenditures consist of internal R&D, external R&D and R&D in collaboration with universities and research institutes (Klomp and Leeuwen 1999). Technological opportunity emphasizes the importance of organized activities of R&D in companies (Zakić, Jovanović and Stamatović 2008). Especially for SMEs competing in the international markets, R&D is a strategic issue. Hence, on this premise we may generate hypotheses as below:

H6<sub>0</sub>: Focus on R&D will not have impact on firms' propensity to adopt innovations

H6<sub>a</sub>: Focus on R&D will have a positive impact on firms' propensity to adopt innovations

## 3.3.8 Relationship between Internal Facilitators and Innovation Adoption

The internal facilitators discussed in the preceding sections have a combined influence on the adoption of various types of innovations. Innovation is a complex social process, the successful execution of which requires the extended interaction of many members and activities within the organization each contributing on their part towards changes and improvements planned. The internal environment of an organization comprises of its leadership, organizational structure, resources, climate and culture, market orientation etc. A strong presence of these factors can promote innovations (Hadjimanolis 2000). According to the conceptual model, internal facilitators positively influence adoption of innovations. Hence the hypotheses framed in this regard are as follows:

- H7<sub>0</sub>: Internal facilitators of innovation will not have impact on firms' propensity to adopt innovations
- H7<sub>a</sub>: Internal facilitators of innovation will have a positive impact on firms' propensity to adopt innovations

# 3.3.9 Relationship between Competition and Turbulence and Innovation Adoption

Innovation is sometimes viewed as an incentive to preempt competition. Competition prevailing in the market place may prompt firms to innovate, to stay competitive as well as pose barriers of entry to potential rivals (Gilbert and Weinschel 2005). Baldwin and Sabourin (2000) investigated the competition-innovation linkage in the Canadian food industry. Their study revealed that in the case of a modest competition (number of competitors 6-20) the possibility of product innovations was higher when compared to the situation with small number of competitors (five or less), or that with an intensive competition (more than 20 competitors). Kim and Lee (1993) found a significant positive correlation between environmental hostility and technological innovation. They also found significant positive impact of environmental turbulence on firm innovativeness. This leads to the conclusion that competition intensity and turbulence can predict innovativeness of the SMEs. Therefore, the hypotheses in this regard can be framed as below:

- H8<sub>0</sub>: Competition and turbulence will not have impact on firms' propensity to adopt innovations
- H8<sub>a</sub>: Competition and turbulence will have a positive impact on firms' propensity to adopt innovations

#### 3.3.10 Relationship between Collaboration and Innovation Adoption

Evidences in literature show that interaction, in terms of frequency and richness, between the entrepreneur and the members of a social system can enhance the speed and rate of innovation adoption. The collaboration of entrepreneurs supports the spread of information about innovations, which can positively influence an organization to adopt them. Such networks create bond between organizations within the industry or organizations in different industries. The degree to which

organizations share information with others is referred to as their degree of interconnectedness (Rogers 1995). Gemunden et al (1992) found that technological interweavement or collaboration had a highly significant influence on technological innovation success in German manufacturing firms. The higher the level of collaboration by the entrepreneur, the more likely the organizations are exposed to new ideas and products and hence higher will be the level of innovation adoption. Hence the hypothesis:

- H9<sub>0</sub>: Collaboration with cluster members will not have impact on firms' propensity to adopt innovations
- H9<sub>a</sub>: Collaboration with cluster members will have a positive impact on firms' propensity to adopt innovations

## 3.3.11 Relationship between External Facilitators and Innovation Adoption

The external constructs identified in the present research are competition and turbulence present in the environment, collaboration with cluster members as well as the extent of external sourcing of R&D. An interplay or combination of these factors constitutes the external facilitators of innovation at the firm level. Innovation provides organizations with a means of adapting to the changes happening in the environment and is critical for firm survival (Vincent, Bharadwaj and Gowtham 2004). As the literature mostly suggest a positive impact of these factors on innovation, the researcher assumes that external facilitators can predict innovation adoption positively. This argument leads to the generation of hypotheses as below:

- H10<sub>0</sub>: External facilitators of innovation will not have impact on firms' propensity to adopt innovations
- H10<sub>a</sub>: External facilitators of innovation will have a positive impact on firms' propensity to adopt innovations

## 3.3.12 Relationship between Barriers to Innovation and Innovation Adoption

SMEs may not carry out innovation activities for a diversity of obstacles or barriers that inhibit them. Guzman et al (2010) conducted a survey on 247 manufacturing SMEs of Aguascalientes (Mexico) to investigate the barriers that

inhibit various types of innovation adoption. They found a significant negative influence of barriers on innovativeness of the firms. Zhu et al (2011) in their survey on 41 SMEs in China found that institutional barriers hampered innovativeness of firms. Barriers may be either internal or external to the firms. In their study on barriers in 18 European Union countries, Holzel and Janger (2011) also found significant negative influence of barriers on innovation adoption. These findings lead us to the conclusion that barriers can significantly predict innovation adoption and that the relationship between the two is inverse. Hence, the hypotheses in this regard are framed as below:

- H11<sub>0</sub>: Barriers to innovation as perceived by the entrepreneurs will not have impact on firms' propensity to adopt innovations
- H11<sub>a</sub>: Barriers to innovation as perceived by the entrepreneurs will have a negative impact on firms' propensity to adopt innovations

### 3.3.13 Relationship between Innovation Adoption and Business Performance

Innovations contribute in several ways. Research evidence shows that there exists a strong correlation between performance and innovations. Innovation offers cutting edge to firms at the market place. One of the major reasons for relatively small firms to survive in the highly competitive global markets is the complexity and precision with which they manufacture products which are too difficult to imitate (Tidd, Bessant and Pavitt 2005). According to Kemp et al (2003), innovation should finally result in improved performance by the firms adopting them in comparison with those not adopting them. Loof et al (2001) found a significant relationship between innovative input and innovative output in a survey conducted at Sweden. Favre et al (2002) concluded that there is a positive impact of innovations on profits. These empirical findings suggest us to conclude that innovation adoption will significantly predict business performance outcomes which can be measured in terms of market as well as financial performance. Hence the hypotheses can be framed as follows:

H12<sub>0</sub>: Innovation adoption will not have impact on the business performance of the firms

H12<sub>a</sub>: Innovation adoption will have positive impact on the business performance of the firms

# 3.3.14 The Mediating Role of Innovation Adoption between the Pre Adoption and Post Adoption Constructs

There are evidences in the previous literature that there is a direct and robust relationship between organizational innovation and business performance. However, the relationship between the antecedents of innovation, innovation itself, and organizational performance outcomes is yet to be empirically tested with one sample (Wolfe 1994). Research evidences support the argument that innovation serves as a key mediator between antecedents of innovation and performance (Damanpour and Evan 1984). Innovation is found to be mediating the relationship between environmental uncertainty and competition. The relationship between organizational level variables and business performance are also mediated by innovation (Vincent, Bharadwaj and Gowtham 2004). Certain studies have treated the construct 'innovation adoption' as a partial mediator establishing direct relationships also among the independent and dependent variables. The present study has conceptualized the construct 'innovation adoption' as a complete mediator between the select pre adoption constructs and post adoption construct-business performance. The direct relationships between the variables, without the mediator, are outside the scope of this research and hence are not proposed to be tested by the researcher. Hence the hypotheses proposed in support of the said arguments are as below:

- H13<sub>0</sub>: Innovation adoption will not mediate the relationship between the pre adoption constructs and business performance
- H13<sub>a</sub>: Innovation adoption will positively mediate the relationship between the pre adoption constructs and business performance

## 3.3.15 Relationship between Innovation Adoption, Implementation and Business Performance

Implementation is the decisive gateway between the decision to adopt the innovation and the routine use of the innovation (Klein and Sorra 1996). Baer and Frese (2003) found a stronger and positive relationship between the organization's

adoption and implementation of process innovations and its financial performance. Commitment to innovation throughout the organization will accelerate the performance, as more employees are collaborating with the leadership supporting innovation rather than resisting it (Gupta 2008). Researches on innovation have predominantly focused on innovation adoption rather than on implementation. Adoption decision is only the beginning of innovation process. The process will be successful only if it is implemented and organization derives benefits out of it (Sawang 2008). In their study on SMEs, Lin and Chen (2007) confirmed that successful implementation of innovations lead to organizational improvements in the form of sales, ROI, ROE, ROA and profits. Hence, we may presume that innovation implementation can positively moderate the path between innovation adoption and business performance. This leads to the generation of next set of hypotheses as below:

- H14<sub>0</sub>: Innovation implementation will not moderate the causal path between innovation adoption and business performance
- H14<sub>a</sub>: Innovation implementation will positively moderate the causal path between innovation adoption and business performance

## 3.4 ASSOCIATION BETWEEN DEMOGRAPHIC VARIABLES AND INNOVATION ADOPTION

The demographic factors surrounding a firm can affect or influence the innovativeness of the firm. The essential demographic factors that may influence or bear an association with innovation adoption can be the ownership structure and age of the firm, size of the business in terms of the number of permanent as well as temporary workers employed, segment of operation in the knitwear value chain, export orientation of the firms and the personal background of the responding entrepreneur in terms of his education, prior experience in the industry and generation in business. The association, that each of these variables holds with firm's innovativeness is therefore, another interesting and important area of inquiry.

The SMEs operating in Tirupur knitwear industry have basically three different types of ownership structures. They are sole proprietorships, partnerships

and limited companies (either public or private). A sole proprietary concern is totally under the control of one entrepreneur and hence his vision as a leader will significantly impact his firm's innovativeness. Partnerships will have a team of entrepreneurs and their combined orientation will decide the innovativeness of the firms. Limited companies have distinct management and ownership. Their innovativeness will mostly depend upon the orientation and vision of the managers in charge and also by the board of directors to an extent. Leech and Leahy (1991) investigated the ownership structure of British companies of its causes and consequences. They concluded that the company's opportunity for growth depends on the concentration of ownership and the directors' control. It is therefore, worth inquiring whether innovation adoption bears any association with ownership structure.

The present research focuses on the Small and Medium Enterprises operating in the knitwear cluster of Tirupur. Hence whatever results derive out of the study will be applicable to the SMEs at large. Another way of defining 'size of a firm' is in terms of number of employees working in the firm. A number of researchers have investigated the correlation between 'size' in terms of number of employees and the 'innovativeness' of the firms. Aboel et al (2011) in their study on manufacturing firms at Uruguay reported positive relationship between firm size and innovation. Kleinknecht and Mohnen (2002) found that the propensity to innovate is positively related with size. Archibugi et al (1995) in their study on Italian manufacturing industry have also found a positive correlation between firm size and innovation intensity. Hence the presence of association between firm size and innovation adoption can be enquired.

Certain research evidences show that a firm's innovative activities may be subject to learning effects due to which firms' innovativeness may improve with the passage of time. Older organizations are thought to be better at innovation because they have established resources and procedures for survival (Kimberly and Evanisko 1981). Some others show inverse relationship between firm age and innovation (Vincent, Bharadwaj and Gowtham 2004). Huergo and Jaumandreu (2002) in their study on 2300 Spanish firms found that entrant firms tend to present the highest

probability of innovation while the oldest firms tend to show lower innovative probabilities. Balasubramanian and Lee (2008) in their study based on US patent data found that firm age was negatively related to technical quality, and that this effect was greater in technologically active areas. Whether it is positive or negative, there seems to be an association between firm age and innovation. Therefore, the association between age of the firms and their innovation adoption in the context of Tirupur knitwear industry is worth enquiring.

Entrepreneur, in an SME context, has a significant influence on the innovativeness of his firm. The educational background of the entrepreneur and his prior experience in the industry is sure to influence his orientation towards innovativeness. Individuals with higher education levels are supposed to be more open minded about organizational change. Education level also improves the understanding and interpretation of information that in turn enables innovation (Vincent, Bharadwaj and Gowtham 2004). Prior experience and skills gained through informal learning is always useful in making a start. In his study on SMEs at Cyprus, Hadjimanolis (2000), found that entrepreneur's education and cosmopolitanism had significant positive correlation with innovation. Romijn and Albaladejo (2002) in their study in small electronic and software firms in the southeast England found that education and prior experience of the entrepreneurs significantly predicted innovation capability of these firms. These findings lead us to inquire whether education of the entrepreneur and his prior experience in the industry is some way associated with innovativeness of his firm.

Based upon the source of inheritance of business, an entrepreneur may be a second generation or third generation entrepreneur or the like. He may be a first generation entrepreneur and would have started business on his own. For an entrepreneur who has inherited his business, an established system would be in place; whereas for the first generation entrepreneur, he is responsible for the entire business which he establishes. Hence, the association between generation of entrepreneur in business and innovativeness of his firm is another interesting area of inquiry.

The knitwear value chain comprises of a series of manufacturing processes that can be broadly classified into 6 important segments. These are knitting, wet processing, garmenting, compacting, printing/embroidery and others. The researcher proposes to enquire whether any of these segments is more innovative than others.

The relationship between innovation and export performance is often regarded to be of paramount importance to an economy and has long been investigated by many researchers. At the macro level, there are plentiful evidences of the linkage between a country's export performance and its innovation activities (Narula and Wakelin 1998). At the firm level, innovating firms have incentives to expand into other markets so as to earn higher returns from their investment (Teece 1996). It is therefore necessary to find out whether export orientation and innovativeness of firms are mutually associated.

## 3.5 ASSOCIATION BETWEEN DEMOGRAPHIC VARIABLES AND BUSINESS PERFORMANCE

The demographic factors surrounding a firm can affect or influence the business performance of the firm. The essential demographic factors that may bear an association with business performance can be the ownership structure and age of the firm, size of the business in terms of the number of workers employed, segment of operation in the knitwear value chain, export orientation of the firms and the personal background of the responding entrepreneur in terms of his education, prior experience in the industry and generation in business. The association, that each of these variables holds with firm's performance can also be analyzed so that meaningful interpretations can be derived.

In their study on governance, ownership structure and performance of SMEs in Ghana, Abor and Biekpe (2007) found that ownership structure and profitability of the firms are significantly associated. O'Regan et al (2006) investigated the ownership-business growth linkage among 207 SMEs in UK and found a positive association. Daily and Dollinger (1992) analyzed the relationship between ownership structure and growth in sales among 186 manufacturing SMEs in USA, by classifying the firms into those that are family owned and managed vs. those that

are professionally managed. The results showed no significant difference between the two groups in terms of sales growth. There are mixed findings in literature, and so the investigation of association between the two in the context of the present study is intended to provide valuable insights.

Similarly, there can be association between size of the firm in terms of number of employees, the age of the firm and business performance. Olutunla and Obamuyi (2008) in their study on 115 SMEs in Nigeria found significant positive relationship between profitability and size of the firms. However, they found a negative relationship between the age of the firms and profitability. In a similar study among 480 Nigerian SMEs, Olusola et al (2011) found significant positive associations between age of the firms and the size of the firms with their business performance. Hence the association of age and size of firms and business performance can be an important area of investigation.

An analysis of business performance, segment wise, will give better clarity on the concern as to which of the segments in the knitwear value chain are performing well in comparison with others. The reasons for the existence of any differences in performance can be enquired and reported based upon the findings. Similarly, an enquiry on the linkage between export orientation and performance can give insights on the existence of any such association in the knitwear industry context of Tirupur, which is primarily an export oriented cluster.

Kolvereid (1996) established significant association between entrepreneur's prior experience and business success. Sinha (1996) analyzed the educational background of entrepreneurs and found that 72% of successful entrepreneurs had minimum technical qualification, whereas 67% of the unsuccessful entrepreneurs did not have any technical qualification. Charney and Libecap (2000) reported significant relationship between entrepreneur's education and business performance. Their study also revealed that entrepreneurship education of employees increased sales growth rates of emerging firms.

Indarti and Langenberg (2008) in their study on 100 SMEs in Indonesia reported opposing results. They found that previous employment of the

entrepreneurs had no significant correlation with business success. Prior experiences in similar sectors/industry also were found to have no significant effect on determining business success. Entrepreneurs with university education were found to be significantly less successful than those with elementary and senior high school education. As empirical evidences show mixed results, the association of education and experience of entrepreneurs with their respective business performances can be analyzed in the context of the present research and reported based upon the findings.

Similarly, the generation of entrepreneur in business may or may not have a bearing on his firm's performance. Beckers and Blumberg (2011) compared the differences between business success of first generation and second generation immigrant entrepreneurs in Netherlands. They found that though the second generation entrepreneurs are much more integrated in the host society, their business success showed not much difference with that of first generation entrepreneurs. Therefore, a comparison among entrepreneurs based on their generation in business and firm performance is an interesting area of inquiry. The association between export orientation of firms and their business performance can also be gauged to derive meaningful interpretations.

#### 3.6 CHAPTER SUMMARY

This chapter has explained the research questions arising in 'innovation adoption' research based on literature review and conceptual model developed by the researcher. The primary and secondary objectives of the study are detailed and hypotheses have been developed to be subjected to empirical testing. Literature was again reviewed during hypothesis development for the sake of clarity and ensuring validity of relationships to be enquired. In the following chapter, the methodology of conducting the research is explained. The research approach, research design, sampling, operational and statistical design pertaining to the study are discussed in detail.