

# **A Critical Evaluation of the Interplay between Relationship Quality and Pricing Mechanisms in Physicians' Prescription Decision Making**

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**Sohail Mahmood Khan**

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## ABSTRACT

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Pharmaceutical managers and sales representatives (PSRs) rely greatly on relationship marketing activities in order to develop relationship quality (RQ) with physicians. The aim is to influence physicians' prescription behaviour to engender positive sales outcomes based on their RQ. There is little known about how PSR-physician RQ develops in the context of Pakistan, or how far RQ helps a PSR to achieve objective outcomes for a firm (i.e. positive sales), when it interacts or interplays with product price, particularly in specific economic conditions such as those of patients in Pakistan - who pay directly for their medicines. Drawing on available literature on RQ, this research firstly aims to discover what determinants are required and why they help to achieve RQ between a PSR and physician. Secondly, by integrating the literature on physician's prescription decision making, it seeks to identify how far product price affects RQ's objective (or sales) outcomes under contingent patient economic conditions.

Based on critical realism's guiding philosophical principles, this qualitative research adopted an embedded case study strategy; and using a semi-structured interview method 22 participants (i.e. pharmaceutical sales managers and physicians) from urban and rural sales areas of Multan in Pakistan were purposively interviewed in two sequential phases.

Findings revealed that along with determinants identified through RQ literature, i.e. firm's image product quality, PSR's visit frequency, product knowledge, ethical selling behaviour and relationship investments, some additional determinants such as PSR's appearance, communication, and flexible responses to varied situations were also required by a PSR to achieve RQ with physicians in the context of Pakistan. These determinants were essential in order to fulfil physicians' technical, as well as social needs. When a PSR fulfils these physician needs, both physician's self-interest and emotional sentiments for a PSR are engendered, which serve as mechanisms that further foster the physician's reciprocity mechanism for a PSR. The presence of a reciprocity mechanism for a PSR thus influences the physician's prescription decision making in terms of a PSR's product. However, findings also indicated that higher product price serves as a barrier, which mitigates the effect of reciprocity mechanism because of the presence of more prevalent mechanisms, i.e. patient's non-affordability due to overall poor economic conditions. This engenders further mechanisms such as physician's emotional sentiments for patients, physician's self-interest in patient's wellbeing, their retention and physician's own practice viability. Therefore, the price of a product did not affect subjective or behavioural outcomes, such as physicians providing more time and priority to the PSR, when they had RQ. However, PSR-physician RQ worked more effectively for PSR in terms of achieving his objective (sales) outcomes, when product price and quality was competitive.

Thus, the findings of this research suggest that RQ determinants are contingent to the research context and the context of the research should be taken into account. Furthermore, RQ's objective outcomes cannot be seen in isolation or by just predicting that RQ between the partners will ultimately lead to objective outcomes. For its comprehensive

understanding and implementation, it is crucial to investigate other prevailing factors, such as: broader economic conditions and the presence of various relationships in the value chain that either support, or restrain, RQ between partners. Because, RQ works more effectively in terms of achieving its objective (or positive sales) outcomes in the context where overall economic conditions and product price related mechanisms support salespeople-customer's RQ related reciprocity mechanism.

## **DECLARATION OF ORIGINAL CONTENT**

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I declare that the work in this assessment was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of this thesis has been submitted as part of any other academic award.

Any views expressed in this assessment are those of the author and in no way represent those of the University.

Signed: Sohail Mahmood Khan

Date: 25/04/2018

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### **Dedications**

*I would like to dedicate this thesis to my father Muhammad Hanif Khan, my beloved late mother Shamim Akhter, my wife Hira Sattar and my beloved sons Humayun and Hamza.*

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# **1 INTRODUCTION**

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## **1.1 MOTIVATION**

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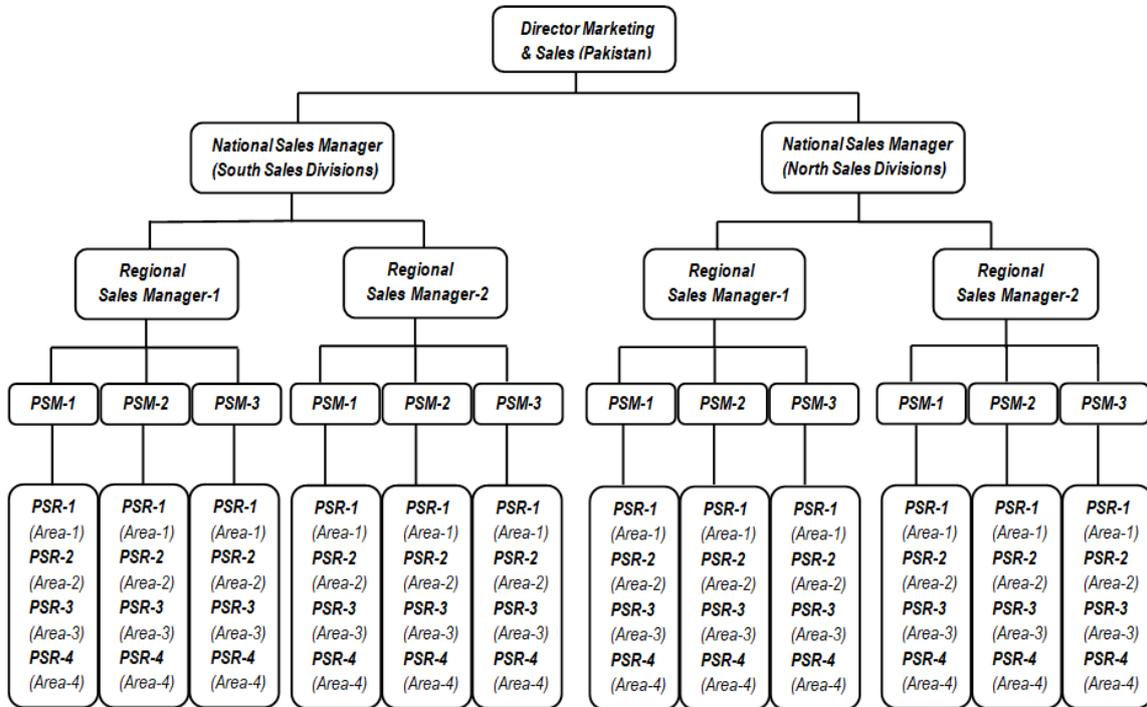
This research was initiated by my own professional experience and academic interest in relationship marketing scholarship and because of its wide application in the selling of pharmaceutical products. Particularly, in the context of the pharmaceutical industry, it is believed by a majority of managers that relationship marketing activities help to achieve long-term customer relationships, which in turn help a firm in achieving its core objectives of sales excellence and hence profitability. The theories of relationship marketing also put forward such claims and there is no doubt, if applied appropriately, relationship marketing activities help to achieve quality relationships with customers. However, how these quality relationships develop and transcend into actual sales outcomes in the presence of other factors, such as product price and patient's particular economic status, is not dealt with adequately in existing RQ literature-particularly in the context of pharmaceutical sales. This interest in finding out the 'reality' of PSR-physician RQ and its outcomes in terms of physician's prescription decision making, i.e. for whom and in what conditions these quality relationships work more effectively in terms of achieving sales or objective outcomes, motivated me to undertake the DBA programme and this research.

## **1.2 RESEARCH CONTEXT**

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This research was carried out in the context of the Pakistani pharmaceutical industry's sales structure (mainly in its Multan sales division, please see section one in chapter 4). The primary entities of pharmaceutical sales structure includes physicians, patients, the pharmaceutical firms and their salespeople. Pharmaceutical firms include multinationals (or MNCs), national (or local) players - and the franchise operations of national firms. However, the two major categories of pharmaceutical firms (i.e. MNCs and national) comprise the vast majority of the Pakistani pharmaceutical industry. Almost all of the MNCs and national firms have divided their product portfolios into different groups; therefore, there is a huge sales-force within these firms that interacts with physicians to sell the firm's products. Thus, there is intense competition between firms, principally due to the presence of the generic or 'me-too' products. Therefore, all such firms depend on the quality of their products and an effective sales team who devote their efforts to developing quality relationships with physicians in order to maximize their firm's market share. The sales team is usually directed by a marketing and sales director, supported by national and regional sales managers, who are responsible for pharmaceutical sales managers (PSMs) and the pharmaceutical sales representatives (PSRs) who report to them (see figure 1.1 below). Although a sales team is responsible for the sales efforts in their area, PSRs are responsible for promoting products and developing relationships with the local physicians to generate higher

prescription share and to achieve their allocated sales quotas (Andaleeb & Tallman, 1996; Scharitzer & Kollarits, 2000), visiting physicians regularly alongside PSMs. Thus, the role of the PSM is as much field based as it is to have oversight of a specific group of PSRs.



**Figure 1.1: Usual sales team structure in Pakistan**

Each PSR reports to his or her specific PSM, who with their PSRs visit physicians and monitor the individual PSR's sales calls performance and hence their training. Furthermore, an individual PSR also needs the approval of his or her PSM if a physician requests a particular service (such as medical equipment or academic scholarships, etc.) If appropriate, PSMs approve the request at their level, otherwise they refer it to the regional sales manager for approval. PSMs cover and visit a wider sales areas than allocated to PSRs (as there is usually more than one PSR for whom they are responsible). Therefore, PSMs are more exposed the needs of physicians practicing in different sales areas and support their PSRs to develop long-term quality relationships with physicians. Nevertheless, PSRs have a more decisive role in the development of relationship with physicians. This is because as the firm's primary contact persons, they visit physicians on a regular basis in their allocated sales areas (compared to PSMs, who cover wider sale areas) in order to provide the necessary information and trials (by providing free samples) of their medicines (Lang & Chahal, 2018) and offer other services (such as gifts, business dinners, continued medical education) during sales calls (Murshid & Mohaidin, 2017). Furthermore, they need to make the follow-up sales calls in order to remind physicians about their products' name, information and to request a share of prescription. This is because of the presence of a huge number of PSRs from different MNCs and national firms in Pakistan, resulting in many individual visits to physicians (sometimes lasting only a few minutes). Physicians can therefore

consequently find it hard to remember a particular PSR's product and hence prescribe it to patients.

Physicians also need the products' and services' information offered by PSRs. This is because the pharmaceutical industry is a highly dynamic in terms of new product innovations and advancements in treating diseases (e.g. Lagace et al., 1991). Therefore, physicians perceive the PSRs' visits to be very important as they consider PSRs a primary source of information (e.g. Wright & Lundstrom, 2004). As physicians are busy in their clinical practices, to keep themselves updated, they seek out information from PSRs (Murshid & Mohaidin, 2017). These interactions with PSRs help physicians to acquire the necessary information for their patients' treatment and wellbeing. Therefore PSRs and physicians have a primary or direct relationship in this sales structure; although the patients are the end-users of their products or services - they do not have any direct relationship with PSRs, who therefore have a contingent (or indirect) relationship with patients (please see figure 2.5).

Patients have their primary or direct relationship with physicians as they seek healthcare services by paying physicians and also pay directly for the prescribed medicines at pharmacies. As a developing country, the vast majority of patients in Pakistan live in rural areas (small towns or villages) and their income is primarily dependent on agriculture. On the other hand, the population in urban areas (or cities) generate more income; however, they have more household financial commitments. Physicians who practice in an area for many years, normally have a good awareness of the economic and medical conditions of their patients. Therefore, patients' particular economic and medical conditions and the price of products have a great impact in deciding the choice of a particular pharmaceutical product.

Physicians therefore hold the more powerful role in this sales structure (Mehralian et al., 2017) because they act as agents on behalf of patients in deciding the pharmaceutical product(s) or medicines to treat a patient's particular medical condition (Murshid & Mohaidin, 2017). Therefore, physicians are the direct customers of pharmaceutical firms (Shamimulhaq et al., 2014). Moreover, given the intense competition between firms, relationship based selling has become important for firms' PSMs and PSRs, especially when physicians have available hundreds of brands under one product category from which to prescribe, with varying and/or similar prices.

### **1.3 RESEARCH PROBLEM**

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Relationship marketing (RM) has attracted the interest of commentators when reconsidering the inefficiencies of a traditional transaction-based marketing approach (Dwyer et al., 1987; Payne et al., 1998; Rose, 2018; Sheth & Parvatiyar, 1994). This is particularly the case when commentators have considered mature industries and those that are subject to intense competition (Vieira et al., 2008). In such contexts customers are more demanding and need more attention and collaboration from the sellers (Sheth

& Parvatiyar, 2000). Moreover, the goods or services offered by sellers provide little or no differentiation (Vieira et al., 2008). Many alternatives of similar products or services are available at varying prices (Ryu & Lee, 2017) and customers have become more price sensitive (Çalık & Balta, 2006) in particular perhaps as a response to a prevailing economic climate. RM is often seen as capable of mitigating such issues (Jham & Khan, 2008; Prasertchuwong, 2018). This is because RM provides a means of exerting differentiation by building long-term relationship bonds with customers to achieve their loyalty and retention (Wray et al., 1994). Alongside customer retention, RM also provides sustainable competitive advantage to organizations because the intangible facets of relationships are not easy for competitors to duplicate (Roberts et al., 2003). Research on RM in recent decades has also confirmed that it has a helpful impact on business performance (Abdullah et al., 2014). This on-going RM research stream has identified the concept of relationship quality (RQ) as one of its pillars (Vieira et al., 2008). In the realm of interpersonal selling, Crosby et al. (1990) identify that although relationship selling is very important and salespeople act as a relationship manager, future sales opportunities are determined by the RQ between salesperson and customer. It follows that RQ plays a crucial role in the development of customers' patronage intentions (Sciarelli et al., 2017). Therefore, in viewing the importance of RM, pharmaceutical marketers also focus on RM strategies (Wright & Lundstrom, 2004) that seek to develop RQ between pharmaceutical sales representative (PSR) and physician. The aim is to influence physicians' prescription behaviour to engender positive sales outcomes based on relationships (Clark et al., 2011).

Pharmaceutical selling is different to many other contexts, as the primary decision makers (i.e. physicians) are not the end users of the products or services (Clark et al., 2011). The end-users (patients) have a contingent association to the physician within the physician-medical representative's dyadic relationship. Patients cannot affect the physician-medical representative relationship directly, but they can produce a set of circumstances that might cause a change in a physician's behaviour and thus affect prescription decision making as an outcome. For instance, pharmaceutical prices may influence the choice of the brand prescribed by physicians (Gönül et al., 2001), particularly in specific economic conditions, such as those of the patients in Pakistan - who pay directly for their medicines. Pakistan, like other developing countries, has no publicly funded health system and the majority of patients are not members of any health insurance provider and thus bear all or part of the cost of treatment and drugs. This context is likely to influence the prescription behaviour of physicians.

There is considerable research on RQ in different settings and empirical investigation suggests that RQ acts as a mediator between relational input factors (i.e. RQ determinants) from sellers, which produce positive outcomes or consequences in customers (Palmatier et al., 2006). However, the majority of previous studies on RQ have been undertaken from a positivist philosophical approach, therefore, particular use has been made of quantitative methods (Osobajo & Moore, 2017a), including those in a pharmaceutical context (e.g. Clark et al., 2011; Lagace et al., 1991) and in other

settings in general (Caceres & Paparoidamis, 2007; Crosby et al., 1990; Hennig-Thurau et al., 2002 etc.; Osobajo & Moore, 2017b; Sciarelli et al., 2017). Here, RQ outcomes were seen as a constant conjunction of the observable events (between buyer and seller) within the stable conditions of closed systems. There is not a single study in general that has considered RQ outcomes when the relationship interacts with external, or contingent, factors (e.g. the impact of patients' economic conditions, particularly in a pharmaceutical setting) or has seen RQ as taking place in an open system, where different uncontrolled underlying mechanisms countervail or reinforce each other to shape human decision making (e.g. Carter & New, 2004; Danermark et al., 2002; Easton, 2002 etc.).

Furthermore, there is little known about the key determinants that contribute to RQ, as most of the studies on RQ deal with developed countries (e.g. Boles et al., 2000; Clark et al., 2011; Crosby et al., 1990; de Ruyter et al., 2001; Dorsch et al., 1998; Gounaris, 2005; Rauyrueen & Miller, 2007 etc.) and there might be additional (or different) RQ determinants that are required with respect to the Pakistani context - as it is a developing country.

#### **1.4 RESEARCH AIMS AND OBJECTIVES**

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Hence, the overall purpose of this research is to critically explore the determinants and mechanisms that contribute to RQ. Furthermore, the aim is to investigate how far product price (and related mechanisms) have an impact on the "outcomes" of PSR-physician's RQ under specific patient economic situations - in the context of Pakistan. Hitherto, no research has been undertaken in this context to date.

This research seeks to address the following research questions:

1) What determinants are needed and why are they required to build up RQ between PSRs and physicians in a Pakistani pharmaceutical context?

2A) How does PSR-Physician RQ (i.e. trust, satisfaction and commitment) interact with the product price in relation to patient's economic status?

2B) What are the outcomes of this interaction in terms of physicians' prescription decision making and tendencies in their choice of pharmaceutical products?

In order to operationalize the research questions, the following research objectives are developed:

- To identify the key determinants and their underlying mechanisms needed by PSRs to build RQ with physicians in the Pakistani pharmaceutical selling context.
- To explore how physician-medical representative dyadic RQ interacts with product pricing and related mechanisms under the influence of contingent patient economic conditions.

- To examine the interplay of the underlying mechanisms and the tendencies they exhibit in the physician's prescription decision making in terms of pharmaceutical brands.
- To explore the efficacy of physician-PSR RQ, i.e. under what conditions, or contexts, it is more effective in terms of its outcomes.

## **1.5 RESEARCH APPROACH**

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The research approach of this study is based on the guiding principles of critical realism. Critical realism believes in an open system of inquiry and emphasises outcomes resulting from contingent conjunctions of mechanisms that exhibit tendencies rather than regularities (Ackroyd, 2009; Danermark et al., 2002). Such elements can be better explored and explained through qualitative methods (Sayer, 1992). Such explanations first require the identification of underlying mechanisms and then verification of how these mechanisms interact within different contexts to produce certain outcomes (Reed, 2009; Sayer, 2000).

Therefore, critical realism suggests of reality that our concepts are theory-laden (Sayer, 1992) and considers prior theoretical concepts as real features of the world (Maxwell, 2012). Thus, to conduct this research prior theories on the RQ phenomenon are used to identify the inter-relationship between different variables (i.e. RQ determinants, dimensions and outcomes) introduced by these theories to infer their related mechanisms. Further mechanisms are identified by reviewing the literature on physician's prescription decision making. These concepts and structural analysis of pharmaceutical sales are used and integrated to form the preliminary conceptual framework before entering the field for data generation (Sobh & Perry, 2006).

Based on an embedded case study strategy and using a semi-structured interview method, 22 participants (i.e. pharmaceutical sales managers and physicians) were interviewed in two sequential phases to address the research questions and objectives. The data generated was then qualitatively analysed in order to identify and verify the mechanisms associated with determinants needed to develop PSR-physician's RQ. Moreover, how RQ (and mechanisms associated) interacts or interplays with mechanisms related to the product's price and patients' economic conditions present in an open system to produce physician's prescription decision making as an outcome was considered. Based on the findings and analysis, this research is concluded by presenting for whom, and under what conditions, PSR-physician's RQ outcomes are more effective in achieving RQ's objective outcomes in terms of physician's prescription decision making. The following section provides the structure of the thesis, which further highlights the research process undertaken.

## **1.6 STRUCTURE OF THESIS**

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Along with this introduction chapter, this thesis consists of five main chapters:

Chapter two presents a review of RQ literature, which not only provides the current knowledge base on RQ but also helps in the development of an initial conceptual framework by reviewing and integrating the literature on physician's prescription decision making. After the introduction, it begins by examining prior conceptualization and modelling of RQ that has been achieved within closed system based enquiries. This is followed by the examination of different RQ definitions and dimensions, which leads to adoption of a definition, as well as dimensions, for this research. After the adoption of a RQ definition, each of its dimensions (trust, satisfaction and commitment) are examined to infer their mechanisms. RQ determinants are then discussed and some of them are chosen, by providing a rationale or justification on their appropriateness in the context of pharmaceutical setting, particularly in the context of Pakistan. This is followed by an examination of RQ outcomes, i.e. both subjective and objective outcomes through the effects of different mechanisms. Throughout the review, the gaps in current knowledge of RQ, which this research seeks to address, are identified. Finally, an initial or preliminary conceptual framework is presented, which helps later in data generation and analysis.

Chapter three provides a discussion of the methodology and data generation methods used in this research. It begins by providing a statement of the aim and objectives of this study, which were developed through the initial conceptual framework drawn from the literature review. The next section discusses the philosophical perspective of critical realism, which underlies the research process. Next, the reasons for choosing an embedded case study design and qualitative research approach are discussed. Details of participant selection and recruitment are followed by details of the methods of data generation, preparation and analysis. Finally, ethical considerations are discussed.

Based on the initial conceptual framework, chapter four examines the perspectives of pharmaceutical sales managers and physicians on RQ and its outcomes as physician's prescription decision making under contingent patients' economic conditions. Part A of chapter four begins with the context of the case study so that the findings can be followed. Next, the details of participants that were interviewed for the first phase of this embedded case study are described. Parts B and C, which comprise the main body, present the findings, analysis and discussion. This chapter finally presents a new revised conceptual framework, which also encapsulates the underlying mechanisms that affect the formation of RQ and its outcomes.

Chapter five presents the findings, analysis and discussion of the second phase of this research, which was conducted in rural and urban sales areas as embedded subunits of the overall case. This phase extends the chapter four findings one step further and

gathers the physicians' perspectives on how the mechanisms identified in the first phase interact with product price in two economically different geographic areas.

Chapter six presents the research conclusions and begins by summarizing the findings with respect of the research questions. The limitations of this research are considered, followed by discussion of contribution in relation to existing RQ knowledge. Next, the practice implications and recommendations are discussed. Finally, suggestions for future research and comments on the research approach are also considered.

## 2 LITERATURE REVIEW

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### 2.1 INTRODUCTION

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Relationship quality (RQ) has been discussed in the literature as an overall strength of a relationship (Smith, 1998a) and is considered the main determinant of on-going future relationships between the partners (Crosby et al., 1990). There is wide agreement in literature that RQ between partners is a decisive factor in the durability and strength of this relationship and, therefore, the ultimate achievement of RM activities (Hennig-Thurau, 2000). As such, there is evidence that customers' perceived relationship quality provides a firm with better results and greater competitive advantage than either product or service quality (Vieira et al., 2008). Considerable research in various contexts has reported that the quality of relationships between salesperson and customers provides a firm with superior subjective and objective outcomes, such as: customer retention (Hennig-Thurau & Klee, 1997) behavioural loyalty (De Wulf et al., 2001; Prasertchuwong, 2018), sales effectiveness (Crosby et al., 1990; Palmatier et al., 2006) and customers' business share (Leuthesser, 1997). Therefore, RQ has emerged as a central construct and a key factor in the success of long-term business relationships (e.g. Hennig-Thurau, 2000; Leuthesser, 1997; Lin, 2013; Naudé & Buttle, 2000).

The purpose of this chapter is to provide the insights on the current RQ knowledge base and highlights the issues in existing literature that this research seeks to address. Further maintaining critical realism's view that our concepts are theory-laden (Sayer, 1992), prior theories on the RQ phenomenon are used to identify the inter-relationship between different variables (i.e. RQ determinants, dimensions and outcomes) introduced by these theories to infer their related mechanisms (please see section 3.3.3.2 and 3.3.3.3). Additional mechanisms are also identified by reviewing the literature on PSR-physician relationships as well as physician's prescription decision making and integrating an analysis of the Pakistani pharmaceutical selling structure. The resulting literature review is used to form an initial conceptual framework. Therefore, the initial section of this chapter firstly describes the literature search strategy. Next it presents how scholars have previously conceptualized and modelled RQ in different contexts. After this consideration turns to the varied definitions and dimensions of RQ in different contexts, which leads to the adoption of a definition and dimensions of RQ for this research. Then the next section offers a critical evaluation and the identification of determinants that influence RQ between physician and PSR in the context of Pakistan. Finally, the chapter presents RQ outcomes in terms of physicians' prescription decision making, while taking into account the product price and patients' economic and medical conditions. To conclude, the review results into an initial conceptual framework to evaluate the PSR-physician RQ outcomes in terms of prescription decision making.

## **2.2 LITERATURE SEARCH STRATEGY**

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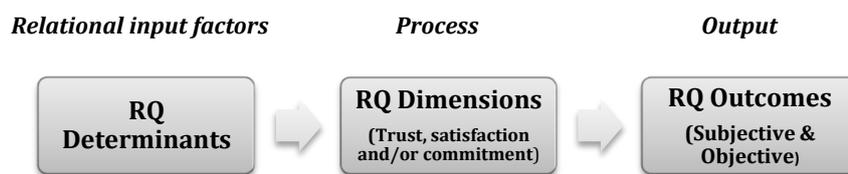
This research uses descriptive narrative inquiry around the literature on RQ and other related concepts. Review of literature has revealed that RQ is a higher order construct, which is comprised of trust, satisfaction and commitment (e.g. Smith, 1998b). The literature was searched using different techniques. For instance firstly journal articles were searched using the keywords: 'relationship quality', 'relationship quality in business-to-business, business to consumer markets, and/ or relationship quality in interpersonal professional services', 'how salespeople build quality relationships', 'trust between salesperson and customers', 'customer's satisfaction and commitment' etc. Further literature on the PSR-physician relationships and physician prescription decision making was searched by using key words such as 'relationship quality in the pharmaceutical industry', 'relationships between medical representatives and physicians', 'physicians relationship with pharmaceutical industry', 'pharmaceutical marketing and other factors in prescribing decisions', 'patients' trust in physicians', 'moral hazard in physician prescription behaviour', 'pricing of drugs and its impact on physicians' choice behaviour', etc. Journal articles were also considered through cross referencing technique i.e. by following the different related articles' reference lists. The databases mainly used Google Scholar and University of Gloucestershire's library discovery services which has further access to different databases such as: business source complete, Abi/Inform, EBSCO, Proquest, Emerald, Science direct etc. Some related text books were also consulted.

## **2.3 PRIOR CONCEPTUALIZATION AND MODELLING OF RELATIONSHIP QUALITY:**

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The idea of RQ was first introduced by Evert Gümnesson in 1985 (Gümnesson, 1987). However, it attracted more attention after the seminal work offered by Lawrence A. Crosby and colleagues in 1990. Since then, scholars and researchers have extensively examined determinants, dimensions and outcomes of RQ in different business-to-business and business-to-consumer marketing contexts (Osobajo & Moore, 2017b). For example in distribution or channel marketing (Dwyer et al., 1987; Kumar et al., 1995), industrial marketing (e.g. Holmlund, 2008; Huntley, 2006), supply-chain marketing (e.g. Asnai et al., 2009; Woo & Ennew, 2004), retail marketing (Hennig-Thurau, 2000; Shamdasani & Balakrishnan, 2000; Wong & Sohal, 2002), pharmaceutical marketing (Clark et al., 2011; Lagace et al., 1991), financial retail marketing (e.g. Bejou et al., 1996; Ou et al., 2012; Wray et al., 1994), life insurance (Crosby et al., 1990). Within the large body of RQ literature, irrespective of its focus on business-to-business (Boles et al., 2000; Parsons, 2002; Smith, 1998b) or business-to-consumer relationships (Bejou et al., 1996; Clark et al., 2011; Crosby et al., 1990; Lagace et al., 1991; Wray et al., 1994) attention is placed on people-based interpersonal relationships and their role in both goods and/or service sales situations.

Although RQ has been widely investigated as a vital construct in the RM literature (Lee, 2016) in the different contexts discussed above, there are still ambiguities in its conceptualization due to a lack of consensus on what it constitutes (Hennig-Thurau et al., 2001; Holmlund, 2008; Sciarelli et al., 2017). There is however consensus among scholars that RQ is a high order (or meta-construct) that encompasses a variety of distinct, but interrelated, dimensions (Crosby et al., 1990; Dorsch et al., 1998; Giovanis et al., 2015; Hennig-Thurau et al., 2002; Roberts et al., 2003; Rose, 2018). Among these dimensions trust, satisfaction and/or commitment are accepted as the dimensions that conceptualize RQ in the majority of studies (Athanasopoulou, 2009; Rose, 2018; Sciarelli et al., 2017; Vieira et al., 2008). This consensus is based around the RQ conceptualization offered by Crosby et al., (1990). According to them, RQ is comprised of at least two dimensions i.e. 'trust' and 'satisfaction' - which are engendered by input variables (or determinants). RQ also gives rise to output variables, i.e. positive outcomes or consequences. This input (determinants)-process (dimensions)-outcome based approach to modelling RQ that has emerged in the literature is outlined below in figure 2.1.

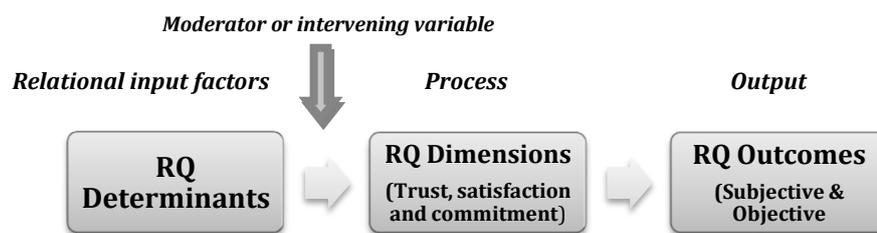


**Figure 2.1. Prior relationship quality modelling**

Considerable previous research has thus considered RQ as a mediator between relational input factors (i.e. RQ determinants) from sellers that produce positive outcomes or consequences in customers (Palmatier et al., 2006). Examples of positive outcomes are: customer loyalty, re-purchase intentions, words-of-mouth and recommendations; and there are presumptions that these subjective outcomes will ultimately lead to objective outcomes, which are increased financial or sales performance of a firm (Vieira et al., 2014).

However, the majority of previous studies on RQ have been undertaken within a closed system; including those conducted in a pharmaceutical context (e.g. Clark et al., 2011; Lagace et al., 1991) and in other settings (e.g. Bejou et al., 1998; Boles et al., 2000; Caceres & Papparoidamis, 2007; Crosby et al., 1990; Hennig-Thurau et al., 2002 etc.). In these studies, RQ outcomes were seen as a constant conjunction of the observable events (between buyer and seller). Studies in RQ literature that consider RQ outcomes when the relationship interacts with external, or contingent, factors (e.g. the impact of patients' economic conditions particularly in a pharmaceutical setting) or are seen as taking place in an open system, where different uncontrolled underlying mechanisms countervail, or reinforce each other to shape human actions in a particular social situation (e.g. Carter & New, 2004; Danermark et al., 2002; Easton, 2002 etc.) are rare. There are few studies that have considered the interaction effect of moderators and/or

intervening variables with determinants when modelling RQ (as reflected below in figure 2.2). For example, De Wulf et al. (2001) verify the impact of product category involvement and customer relationship proneness on RQ. Similarly, Lin (2013) validated the development of RQ under the presence of customers' relationship proneness and customer perceived price as moderators. Conversely, previous studies did not consider the impact of moderators and/or intervening variables on the outcomes mediated through RQ and the presumption in prior work is of a closed system. Therefore, RQ outcomes particularly objective (or measureable-sales) outcomes have remained unexamined i.e. how RQ interacts with wider contingent contextual factors to produce actual outcomes.



**Figure 2.2 Prior relationship quality modelling**

Despite limited empirical investigation, many RQ researchers draw attention to these contingent factors, which they suggest can influence the outcomes of an exchange relationship. For example, Leuthesser (1997) indicates that RQ impacts significantly on business share, but how the overall environment interacts with this is, as yet, unknown and there is a need for further investigation. Similarly, Hennig-Thurau and Klee (1997) pointed out that in addition to intra-psychological mechanisms of RQ, there might be other contextual mechanisms that can influence customers' repurchase decision and that these should be included in an RQ model. Additionally, in terms of the importance of contingent mechanisms, Holmlund (2001) discusses the influence of other relationships in the value chain on the outcomes of RQ as a challenging area for future research. It appears from the literature that much of the limitation in evaluating important contingent factors on the outcomes of RQ is due to the use of quantitative approaches and regression techniques (e.g. Wray et al., 1994). Similarly, Smith (1998a) discusses the analysis of the interaction of potential confounding variables and their threshold level to each other, which is not possible with the use of regression techniques. Osobajo and Moore (2017a) also recently confirmed that the majority of existing studies on RQ are confined to quantitative methods. An advanced understanding of RQ, and its effectiveness in buyer-seller relationships, requires the analyses of contextual factors that structure the exchange process (Fichman & Goodman, 1996). Furthermore, Palmatier et al. (2006) suggest that along with the identification of the factors that contribute to RQ, there is also a need to verify under what conditions RQ provides the expected positive outcomes.

There is a clear recognition by the scholars of the need to include the contingent contextual factors in research on RQ phenomenon, however the choice of their research

approach largely precludes this. Limiting considerations on purely technical grounds does not serve to create a better understanding of RQ phenomenon. Therefore, this research considers the outcomes of RQ in an open system where different objects of the study are considered as entities (such as PSR, physician, patient and pharmaceutical product) that hold their own causal powers and mechanisms; and buying decisions (i.e. physicians' prescription decision making) are made through the interactions of different mechanisms (Danermark, 2002). This includes the characteristics of pharmaceutical products (i.e. quality and price) and physician-patient relationship (in particular the patient's economic conditions) that can interact with PSR-physician's RQ outcomes. The pharmaceutical sales context is characterized by the PSR's frequent interaction with physicians, which is necessary to develop RQ (Clark et al., 2011; Lagace et al., 1991). Therefore, this context provides an opportunity, firstly, to investigate the factors that can develop interpersonal RQ between PSRs and physicians. Secondly, it provides an opportunity to investigate the outcomes of RQ under the contingent economic conditions of the patient in terms of the price of a product a physician prescribes and patients' ability to afford it.

However, it is argued that to provide a better understanding of RQ, it is obligatory to evaluate both the definitions and the dimensions that form the RQ construct (Woo & Ennew, 2004). Therefore, to conceptualize RQ for this research it is necessary to define RQ in the first instance. Since, the identification of suitable determinants that influence the PSR-physician's RQ can only be possible after deciding what RQ is and what it comprises (i.e. its dimensions). Furthermore, for academic researchers it is crucial that a conceptual definition is explained as a precondition of valid and reliable measures used to propose and test the theory (Broom et al., 1997).

#### **2.4 DEFINITIONS AND DIMENSIONS OF RELATIONSHIP QUALITY:**

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The review of RQ literature reveals that despite more than two decades of RQ research, there is still no agreement on a universal definition of RQ and the dimensions that make up the RQ construct (Athanasopoulou, 2009; Jelodar et al., 2016; Jiang et al., 2016; Osobajo & Moore, 2017b; Rose, 2018; Smith, 1998a; Vieira et al., 2008). Many authors have argued about the reasons for the lack of a singular formal RQ definition. For example, in an early study Hennig-Thurau (2000) discusses that consideration of the literature on RQ reveals: there is a lack of a sophisticated discussion on the complex issues of relationships between partners; everybody has their own point of view on the RQ construct, and scholars do not feel the need to closely define the RQ construct. This has been confirmed by Holmlund (2008), who feels that the RQ construct is still under-explored and lacks a formal definition.

The reason for this lack of universal RQ definition is perhaps that the relationships are of various forms, which can be observed across various business markets (e.g. business-to-business, business-to-consumers) and at different levels, such as social, emotional, structural and economic (Woo & Ennew, 2004). Therefore, scholars have adopted or

defined RQ according to the suitability of the definition to their research context (Pantouvakis & Bouranta, 2017; Vieira et al., 2008).

As, there are varied RQ definitions in the literature that have emerged from different research settings, it is therefore of equal importance to realize the research context (e.g. Asnai et al., 2009; Casidy & Nyadzayo, 2017; Izogo, 2016b; Roberts et al., 2003). From the RQ literature three notable contexts can be identified (or categorised) where scholars have predominantly studied, and thus defined RQ accordingly. That is: RQ development between firm-to-firm, firm-to-consumers and interpersonal RQ between salesperson and customer (albeit in a firm-to-firm or consumer context) (Osobajo & Moore, 2017b). Categorisation of these study contexts is difficult, as there is a considerable overlap between constructs (i.e. RQ determinants and dimensions) used within, and among, the identified contexts. However, in order to develop general understanding for this research, the RQ studies are categorised according to their focus. For example, the interpersonal selling context is considered, where attention is placed on salespeople's personal or relational characteristics to develop RQ with customers. Similarly, the firm-to-consumer context is considered, where consideration is given to the firm's elements both the goods or services and the contact person's characteristics. Finally, the firm-to-firm context is examined, where the focus is placed on the business seller and firms buying either goods or services. The following sections evaluate the different definitions of RQ that appear from these different contexts. This leads to the adoption of a definition for this research, which rests on the interpersonal RQ between PSR and physicians.

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#### **2.4.1 RQ DEFINITIONS AND DIMENSIONS IN INTERPERSONAL SELLING CONTEXTS:**

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The RQ definitions in interpersonal selling contexts have emerged in the literature both from firm-to-firm and firm-to-consumer selling contexts and salespeople are seen as crucial to developing RQ with customers (Prasertchuwong, 2018). Keating et al. (2003) discusses that from services selling perspective in firm-to-consumer context, RQ is viewed as a "trade-off" between "value and risk". Where customer's perceived uncertainty is reduced, the value of his or her relationship with a salesperson and/or firm is improved (Keating et al., 2003). This is because it has been argued by many scholars that the intangible nature of many services creates uncertainty for customers in their buying decision; for example, life insurance and financial services (e.g. Bejou et al., 1998; Wray et al., 1994). In selling of these kind of services, the salesperson's role becomes more crucial to reducing the uncertainty of a customer by gaining the customer's trust and increasing their satisfaction (Crosby et al., 1990).

Thus, Crosby et al. (1990) propose a highly cited definition of RQ: as a higher-order construct that encompasses at least two dimensions i.e. 'trust in' and 'satisfaction with' salesperson performance in the services selling context of life insurance. Table 2.1 below confirms that most studies in the interpersonal selling context have adopted the

RQ definition provided by Crosby et al. (1990) with trust and satisfaction, as its dimensions.

***Table.2.1 Dimensions adopted in interpersonal selling contexts***

<i>Author/Year</i>	<i>Relationship Nature /Context</i>	<i>Dimensions</i>			
		<i>Trust</i>	<i>Satisfaction</i>	<i>Commitment</i>	<i>Other Dimension</i>
<i>Crosby et al., (1990)</i>	Salespeople and individual customer: buyer perspective: life insurance services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Lagace et al., (1991)</i>	Pharmaceutical salespeople and individual customer: buyer perspective:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Wray et al., (1994)</i>	Salespeople of financial services intermediaries and consumers: buyer perspective	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Palmer and Bejou (1994)</i>	Salespeople of financial services intermediaries and consumers: buyer perspective	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Bejou et al. (1996)</i>	Salespeople and consumers: buyer perspective: financial services providers and consumers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Bejou et al. (1998)</i>	Financial advisers or salespeople and consumers: buyer perspective: financial services providers and consumers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Customer-orientation, Sales-orientation, Ethics, Expertise, Relationship Length
<i>Smith (1998a)</i>	Salespeople and purchasing executives: buyer perspective: B2B goods	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<i>Smith (1998b)</i>	Salespeople and purchasing executives: buyer perspective: B2B goods	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<i>Boles et al. (2000)</i>	Salesperson and business customers: buyer perspective: services telecommunication	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Parsons (2002)</i>	Industrial purchasers and suppliers relationship: buyer perspective: B2B goods: individual salesperson-to-customer & firm-to-customer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Shamdasani and Balakrishnan (2000)</i>	Professional service providers and customers: buyer perspective: services: firm-to-customers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Clark et al. (2011)</i>	Pharmaceutical salespeople and individual customer: buyer perspective	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<i>Ou et al. (2012)</i>	Financial salespeople and the customers of financial institutions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Lin (2013)</i>	Services providers of the banks and their customers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Mullins et al. (2014)</i>	Salesperson and customers of industrial and consumer goods, dyadic perspective	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<i>Al-Alak (2014)</i>	Services providers of the banks and their customers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>Itani and Inyang (2015)</i>	Salespersons of the banks and their retail customers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<i>Balaji et al. (2017)</i>	Services providers of the banks and their customers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

***[Source: Author's compilation]***

From table 2.1 it appears that different scholars merely replicate the studies in different services selling contexts by including different suitable determining constructs and tested their significance to RQ (i.e mainly trust and satisfaction) (Abdullah et al., 2014; Bejou et al., 1996; Boles et al., 2000; Izogo, 2016a; Lagace et al., 1991; Palmer & Bejou, 1994; Wray et al., 1994). Thus, RQ is conceptualized and defined predominantly in interpersonal selling context by considering trust and satisfaction as its social dimensions.

Besides trust and satisfaction, commitment has also attained the attention of some scholars as a necessary first order RQ construct, after the advent of "Commitment and Trust theory of RM" by Morgan and Hunt (1994 as cited in Vieira et al., 2008). Many scholars either define RQ by adding commitment or adopting it as an important dimension, particularly in the interpersonal selling context and also in other contexts (see Tables 2.1, 2.2 and 2.3). For example, in business-to-business interpersonal selling context, Smith (1998b) considers commitment as a necessary RQ dimension with trust and satisfaction. She defines RQ as a higher order construct consisting of positive relationship outcomes, i.e. trust, satisfaction and commitment that reflect the strength of the relationship and that meet the expectations of partners (Smith, 1998b, p. 4). Similarly, in a recent study on RQ, Mullins et al. (2014, p. 39) distinguish the RQ perceived by the customers and salespeople. They define " 'customer relationship quality' as the combined strength of a customer's trust in, satisfaction with, and commitment to a given salesperson, and 'salesperson relationship quality' as the combined strength of a salesperson's perceptions of a given customer's trust in, satisfaction with, and commitment to him/her".

Although the majority of scholars have defined RQ by considering trust and satisfaction as its dimensions; a significant group of scholars have suggested that commitment is also a necessary RQ dimension in interpersonal selling contexts. Therefore, within studies examining such contexts the focus is placed on RQ's social dimensions to conceptualize and define it (please see section 2.4.4 below for more detail).

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#### **2.4.2 RQ DEFINITIONS AND DIMENSIONS IN FIRM-TO-CONSUMER RELATIONSHIP CONTEXTS:**

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Several studies have been conducted under the firm-to-consumer context, and many adopt the dominant view of RQ, and it is defined by trust, satisfaction and/or commitment and the focus is rather placed on seeking to explore what RQ determining factors influence these constructs as outlined below in table 2.2. For example, De Wulf et al. (2001) concentrate on the firm's relationship investment towards consumers (in terms of preferential treatment, direct mail, tangible rewards and interpersonal communication) to engender RQ i.e. to influence trust, satisfaction and commitment as its necessary elements. Similarly, Wong and Sohal (2002) give attention to the role of firms' key individuals' interaction with consumers, and investigate that consumers' RQ with a firm develops through the consumer's trust in and commitment to a particular contact person. In the same context, Wong and Zhou (2006) examine the significance of service quality and customers' overall satisfaction with a shopping experience, in a retail setting, on RQ. Likewise in the context of mobile network services firms, Raza and Rehman (2012) consider trust and satisfaction as RQ dimensions and investigate the influence of service quality, consumers price perception and brand image on RQ.

**Table.2.2 Dimensions adopted in firm-to-consumers relationship contexts:**

Author/Year	Relationship Nature /Context	Dimensions			
		Trust	Satisfaction	Commitment	Other Dimensions
Moorman et al., (1992)	Market research firms and various users: buyer perspective: knowledge services				Perceived quality of interaction
Hennig-Thurau and Klee (1997)	Conceptual/ relationship between firms and consumers	✓		✓	Product/service quality
Hennig-Thurau (2000)	Manufacturers and consumers of electronics products: buyer perspective: firm-to-customers	✓		✓	Product/service quality
Hennig-Thurau et al. (2001)	Universities and their alumni students: buyer perspective: services: firm-to-customers	✓		✓	Service quality
De Wulf et al. (2001)	Retailer-consumer relationship: buyer perspective: services: firm-to-customers	✓	✓	✓	-
(Hennig-Thurau et al., 2002)	Consumers and service firms relationship: buyer perspective: services: firm-to-customers	✓	✓	✓	-
Wong and Sohal (2002)	Relationship between departmental store and its shoppers: individual salesperson-to-customer & firm-to-customer	✓		✓	-
Roberts et al. (2003)	Consumers and services firms buyer perspective: services: firm-to-customers	✓	✓	✓	Affective conflict
Keating et al. (2003)	Online consumers and service providing firms relationship: buyer perspective: services: firm-to-customers	✓			Value, effort, communication, power, understanding
Wong and Zhou (2006)	Relationship between departmental store and its shoppers: individual salesperson-to-customer & firm-to-customer	✓	✓		-
Sanchez-Franco and Rondan-Cataluna (2010)	Relationship between online shoppers and service providers	✓	✓	✓	Emotions
Raza and Rehman (2012)	Relationship between mobile network companies and their customers: firm-to-customer	✓	✓		-
Giovanis et al. (2015)	Relationship between auto repair maintenance firms and their customers: firm-to-customer	✓	✓	✓	Calculative and affective commitment
Izogo (2016a)	Relationship between banks and their customers: firm-to-customer	✓	✓		
Izogo (2016b)	Relationship between banks and their customers: firm-to-customer	✓	✓		
Wahid and Ismail (2017)	Relationship between banks and their customers: firm-to-customer	✓	✓		

**[Source: Author's compilation]**

However, Hennig-Thurau and Klee (1997) argue that in a conceptualization of RQ with trust in and satisfaction with the salesperson, other related factor like social needs, interaction efficiency and cost reduction in transaction should also be taken in account. They view service quality and transactional factors such as product quality as important dimensions, along with trust and commitment, to develop a firm's RQ with consumers. Thus, Hennig-Thurau and Klee (1997, p. 751) define that "RQ can be seen as the degree of appropriateness of a relationship to fulfill the needs of the customer associated with that relationship". In a different context of the relationship between users of market information and firms providing marketing information, Moorman et al. (1992, p. 316) define RQ as "perceived quality of interactions is the degree to which users view user-researcher interactions as productive". The definition provided by Moorman et al.

(1992) reflects a similar view of Hennig-Thurau and Klee (1997) in which both stressed that the interaction between partners should be productive and can fulfil the needs of exchange partners. Conversely, Roberts et al. (2003) view service provider interaction quality with consumers as a determining factor, rather than dimension that leads to greater trust, satisfaction, and commitment. Table 2.2 above shows the dimensions employed by a range of studies that have sought to define RQ, which shows that scholars not only considered social but also product and/or service quality as necessary dimensions of RQ in firm-to-consumer contexts (please see section 2.4.4 below for more detail).

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### **2.4.3 RQ DEFINITIONS & DIMENSIONS IN FIRM-TO-FIRM RELATIONSHIP CONTEXTS:**

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A large number of studies have been done in business-to-business firm level exchange relationships in different research settings, as shown in Table 2.3. Many of the studies adopted the dominant dimensions of RQ, i.e. trust, satisfaction and/or commitment in their research (e.g. Čater & Čater, 2010; Ivens, 2004; Ivens & Pardo, 2007; Leuthesser, 1997; Walter et al., 2003). However, along with trust, satisfaction and/or commitment, many scholars have also considered other dimensions important to influencing RQ according to their research settings. For example, in the channels or distribution context, Kumar et al. (1995) define RQ as a high order construct comprising conflict, willingness to invest in the relationship, expectation of continuity, trust and commitment. Similarly, in the context of a relationship between vendors and their customer firms, Dorsch et al. (1998, p. 130) consider RQ as high-order construct comprising trust, satisfaction, commitment, minimal opportunism, ethical profile, and customer orientation as its dimensions. Thus, both the definitions above consider the formation of RQ not only at social level of firm's representatives but also at their rationally driven behaviours such as minimal opportunism and more customer orientation, ethics, and willingness to invest in the relationship. The reason might be that opportunistic behaviour by one partner leads to a trust deficit, which is prerequisite for the development of RQ. Conversely, customer orientation leads to the greater level of trust development between partner firms and hence RQ between them. Therefore, trust is considered necessary to develop RQ.

However, Huntley (2006) argues that in the majority of RQ studies, it is defined on the basis of relational or social dimensions. For a comprehensive definition in business-to-business firm level relationships, it is important to consider the product related and economic dimensions with the relational. Thus, in the context of industrial buyer-seller relationships, Huntley (2006, p. 706) defines RQ as "the degree to which buyers are satisfied over time with the overall relationships as manifested in product quality, service quality and price paid for the value received and the degree to which relationships function as a partnership". Similarly, Holmlund (2008;2001) argues that the studies on RQ focus more on intangible aspects of relationships, e.g. service quality and communication etc. However, little attention has been paid to its tangible aspects,

such as product related quality, pricing and resources exchange, which should all be considered in a business-to-business relationship. For RQ's broader definition along with social dimension, the economic and technical dimensions should also be considered. Accordingly, in a dyadic business-to-business context, Holmlund (2008, p. 35) defines RQ as "perceived RQ is the joint cognitive evaluation of business interactions by significant individuals in both firms in the dyad. The evaluation encompasses a comparison of experienced with desired, potential, usual or previous interactions which constitute comparison standards".

**Table.2.3 Dimensions adopted in firm-to-firm relationship contexts:**

Author/Year	Relationship Nature /Context	Dimensions			
		Trust	Satisfaction	Commitment	Other Dimension
Dwyer et al. (1987)	Automobile manufacturers and dealers: buyer perspective : B2B goods: firm level	☑	☑		Minimal opportunism
Kumar et al. (1995)	Large and small automobile dealers: buyer perspective: B2B goods: firm level	☑		☑	Continuity expectation, relationship investment, conflict
Dorsch et al. (1998)	Purchasing executives of buying firms and their vendors: buyer perspective: B2B goods: firm level	☑	☑	☑	Minimal opportunism, customer-orientation and ethical profile
Leuthesser (1997)	Industrial purchasing executives of firms and many suppliers: buyer perspective: B2B goods: firm level	☑	☑		-
Naudé and Buttle (2000)	Executives and suppliers from various industries: buyer perspective: B2B goods firm level	☑	☑		Power, profit and coordination
Holmlund (2001)	Conceptual process & outcome: dyad perspective: B2B goods/services: firm level				Technical, social and economic
Hewett et al. (2002)	Industrial purchasing executives and sellers: dyad perspective: B2B goods: firm level	☑		☑	-
Walter et al. (2003)	Manufacturing supplier and purchasing professionals buyer perspective: B2B goods firm level	☑	☑	☑	-
Ivens (2004)	Purchasing managers and suppliers: buyer perspective: B2B goods firm level	☑	☑	☑	-
Woo and Ennew (2004)	Engineers professional services: buyer perspective: B2B services firm level				Adaption, cooperation, atmosphere
Huntley (2006)	Firm and customer representative of IT products and after sales service: buyer perspective: B2B goods/services firm level				Technical, social, economic, time, partnership
Ivens and Pardo (2007)	Professional purchases managers in goods packaging company: buyer perspective: B2B goods/services firm level	☑	☑	☑	-
Rauyruen and Miller (2007)	Customers of courier services: buyer perspective: B2B services Firm Level	☑	☑	☑	Service quality
Caceres and Paparoidamis (2007)	Survey of 234 advertising agencies' clients/ B2B relationship between firms and their clients	☑	☑	☑	-
Holmlund (2008)	Personal interviews from firms managing directors/ process & outcome in B2B settings				Technical, social and economic
Asnai et al. (2009)	Sample of questionnaires survey collected from middle and senior executives of four different countries UK:40, Iranian:55, Russian:41 and Chinese 50/B2B relationship	☑	☑		Profit, power
Čater and Čater (2010)	B2B relationships between manufacturer and customers	☑		☑	Information sharing, coercive and non-coercive power, dependency and conflict
Rasila (2010)	B2B relationships between landlord and tenant	☑	☑	☑	Opportunism, power
Hoppner et al. (2015)	B2B relationships between US and Japanese firms		☑	☑	Conflict
Muylle and Standaert (2016)	B2B relationship between auction and procurement firms	☑		☑	
Odongo et al. (2016)	150 agricultural businesses survey: B2B supply chain relationships between supplier, focal firm and customers	☑		☑	
Rose (2018)	B2B relationship between customer-supplier relationships in family business setting	☑	☑		

[Source: Author's compilation]

Table 2.3 above highlights that along with trust, satisfaction and/or commitment, some scholars have considered other dimensions important for RQ according to their research settings. Minimal opportunism is considered an important RQ dimension by many scholars (e.g. Dorsch et al., 1998; Dwyer et al., 1987; Rasila, 2010). Therefore, opportunistic behaviour is inversely related to trust and should be at a minimum level for greater trust development between the partners (Morgan & Hunt, 1994). Similarly, Kumar et al. (1995) in a distribution or channels relationship context viewed conflict as an important RQ dimension. They found that relationships with greater interdependence between the firms result in greater trust, more commitment and lower conflict, thus leading to quality working relationships.

Some scholars have paid attention to the power balance among the partners as a necessary RQ dimension (e.g. Asnai et al., 2009; Naudé & Buttle, 2000; Rasila, 2010). Due to power abuse, conflict arises: therefore, for the enduring quality of a working relationship, power should be equally shared between the two parties (Asnai et al., 2009; Rasila, 2010). In the same way, as can be seen in table 2.3, some scholars include profit as a necessary condition for RQ development between two firms (e.g. Asnai et al., 2009; Naudé & Buttle, 2000). The same view of profit is also reflected in Holmlund (2008) and Huntley (2006) economic dimensions, whereby they consider important tangible aspects such as economic (profit and/or pricing) and technical (product quality) as well. Woo and Ennew (2004) adopt a different perspective and define RQ as a high-order construct of cooperation, adoption and overall atmosphere in which a relationship develops. Moreover, they view cooperation as a behavioural manifestation of trust and commitment. Adoption is considered as relationship specific investment that either a firm, or both firms, invest in, alligning the exchange process in areas such as products, production process and finance management. Finally, atmosphere is regarded as one of the cooperative intentions that is necessary for RQ development between two firms. Thus, seeing relationship formation at various levels i.e. social, technical, ethical, rational and economic scholars have considered these varied dimensions necessary in order to develop RQ suitable to their research setting in different firm-to-firm relationship contexts. This aspect is further evaluated in subsequent section.

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#### **2.4.4 EVALUATION OF THE DEFINITIONS & DIMENSIONS ADOPTED IN DIFFERENT CONTEXTS:**

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The above sections present the varied first order constructs or dimensions of RQ that scholars have considered, depending on their suitability to the research context. However, 'trust', 'satisfaction' and/or 'commitment' are the most accepted dimensions to conceptualize RQ in a majority of the studies. It appears also from the above sections that the RQ construct is evaluated and defined on the basis of the requirements of the particular context (e.g. Vieira et al., 2008).

For instance, the scope of the firm-to-firm level studies is wider in terms of formation of relationships at different levels such as social, rational, ethical and economic (Athanasopoulou, 2009), therefore research have considered the elements or attributes important to developing RQ between firms (Rasila, 2010). The reason perhaps is that the business-to-business firm level relationships are characterized as being composed of more rationally driven behaviours and are based on contractual mechanisms (Dwyer et al., 1987). Therefore, products and services are exchanged with a greater degree of customization and on negotiated formal contracts (Assael, 1987). Hence, the definitions included social, technical and economic dimensions (e.g. Holmlund, 2001; Huntley, 2006), as well as profit and power (e.g. Asnai et al., 2009; Naudé & Buttle, 2000).

Similarly, for relationships between firm-to-consumer, along with trust and commitment with service provider or contact person (i.e. social dimensions to fulfil social needs), product/or service quality is also considered an important dimension. Such product/or service quality accordingly fulfils the technical needs of the consumers (e.g. Hennig-Thurau, 2000; Hennig-Thurau & Klee, 1997; Hennig-Thurau et al., 2001) and hence is considered as important in developing firm's RQ with consumers. Therefore, the existence of the product/or service in exchange relationships is a necessary condition for the instigation of broader relationship around it (Čater & Čater, 2010). Customers do not show their motivation for continuing the relationship wholly because of the relationship itself unless they receive a quality product/service that matches the customers' expectations by adding value in one way or another (Human & Naudé, 2014). Therefore, product/or service quality is considered a vital dimension for the development of RQ between customer and a firm.

However, as seen above in Tables 2.1, 2.2 and 2.3 there is considerable overlap in terms of social or relational dimensions (i.e. trust, satisfaction and/or commitment) in different studies. For example, at firm-to-firm level relationships, RQ is not only viewed in terms of its technical (product and service quality) and economic (price and profit) but also on social dimensions (e.g. Asnai et al., 2009; Holmlund, 2001, 2008; Huntley, 2006; Naudé & Buttle, 2000). Similarly, social dimensions have been considered vital in the firm-to-consumer context, along with product/or service quality (e.g. Hennig-Thurau, 2000; Hennig-Thurau & Klee, 1997). Therefore, products/or services delivery, economic gains from relationships, and the interaction between the key individuals in the exchange process are all interrelated and basic business functions.

The stress on social dimensions implies that, business relationships cannot be developed merely on the basis of a customer's satisfaction with product or service quality, since it is only an entry condition (Crosby et al., 1990). There also exist some personal and social forces between buyers and sellers (Oliver, 1999) that are realized through successful satisfactory interaction episodes between the key individuals, which make the real difference in shaping the relationships (Čater & Čater, 2010). Therefore, the quality of interaction between the key individuals of firms is a common factor in each definition of RQ (Vieira et al., 2008).

This aspect is examined more precisely in interpersonal selling context, whereby different people-based relational or personal characteristics are investigated, to improve interaction quality and hence to influence RQ (or trust, satisfaction and/or commitment as its necessary elements). The development of an interpersonal relationship with the customers can be done through the interaction of any firm's marketing or operational staff; however, particular attention is paid in RQ literature to the salesperson's role (e.g. Prasertchuwong, 2018; Wray et al., 1994). The role of salespeople as a relationship manager is considered vital, because in many industries they are the firm's primary contact with customers (Crosby et al., 1990). Therefore, in seeing the importance of salespersons' social interactions with customers, the main focus in the literature is placed on the salesperson's personal and relational attributes to influence social dimensions (i.e. trust, satisfaction and/or commitment).

The relationship between customer and salesperson is more interpersonal in nature than the firm-to-firm and firm-to-consumer level relationships (Mullins et al., 2014). The majority of studies and definitions in interpersonal selling have emerged from the services selling context. Because of this it has been argued by many scholars that the intangible nature of many services creates uncertainty for customers in their buying decision-making (e.g. Bejou et al., 1998; Wray et al., 1994). In the selling of services, the salesperson's role becomes critical in reducing the uncertainty level of a customer by gaining customer trust and satisfaction (Crosby et al., 1990). Therefore, extensive attention is paid in RQ research to the salesperson's characteristics, which can help in the development of quality relationships with customers (Palmer & Bejou, 1994). A salesperson's customer-orientation, relational behaviour, frequent interaction with customers and service knowledge, for example, engender RQ that encompasses customer's trust in, and satisfaction, with a salesperson. Accordingly, this leads more strongly to outcomes such as customer purchase decision-making (Palmatier et al., 2006). Therefore, the adoption of dimensions and definitions are highly context dependent. The following section examines the nature of RQ between a physician and PSR in pharmaceutical selling context, which leads to the adoption of a definition and dimensions for this research.

## **2.5 RELATIONSHIP QUALITY IN PHARMACEUTICAL SELLING CONTEXT & RATIONALE FOR ADOPTION OF A DEFINITION & ITS DIMENSIONS:**

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In the pharmaceutical selling context, the role of PSR is very important as they provide physicians, the information services about the use of their product(s) to treat a patient's specific disease(s) or ailment(s) (Lagace et al., 1991). Uncertainty may be inherently present in this context in terms of the physician's perception of trustworthiness of the information provided by a PSR. This is because a physician uses the information in making the decision to prescribe a particular product and is concerned about the wellbeing of his or her patient (Clark et al., 2011). A patient's response to the product develops the physician's trust in the PSR and satisfaction with the information

exchanged with the PSR, and this leads to the physician's commitment with a given PSR to on-going future prescriptions (Lagace et al., 1991).

However, in highly competitive markets such as the pharmaceutical, uncertainty is also present among firms, because there is always a risk of the customers (or physicians) switching to the competitor's products or services (Parsons, 2002). As, more often, once the patent of a branded pharmaceutical product expires, many generic alternatives become available to physicians at varying prices under one therapeutic category (Clark et al., 2011). Therefore, the PSR's role becomes more critical and firms require the PSR's frequent interaction with the physicians to develop relationships and sell their products based on the bond created.

It was suggested earlier that successful satisfactory interaction episodes led to longer-term quality relationships with customers (Crosby et al., 1990). These quality relationships (i.e. based on trust, satisfaction and commitment as its necessary elements) create bonds of an intra-psychological kind (Hennig-Thurau & Klee, 1997). This includes the feelings and emotional states of the customer for a given salesperson developed through the salesperson's efforts in maintaining a relationship with a customer (Al-Alak, 2014). Further the social bonds that develop through social interactions between salesperson and customer also serve as a mechanism (Vieira et al., 2008) that provides customer retention, loyalty and sustainable competitive advantage for the firm. This is because different intangible aspects of the relationship (e.g. interaction quality) cannot easily be duplicated by competitors (Roberts et al., 2003); such loyal customers are less price-sensitive and are less likely to respond to alternative promotional initiatives by defecting to competitors (Stank et al., 2003). Moreover, it is also argued that the higher price levels might be compensated by more congenial social contacts, e.g. interaction frequency (e.g. Holmlund, 2001). Thus, the PSRs' RQ with physicians provides an environment whereby pharmaceutical firms can sell their products based on more secure PSR-physician relationship bonds. The PSR with his/her abilities can develop RQ with physicians and thus can reduce the uncertainty level attached to the pharmaceutical firm by means of enhancing physicians' prescriptions to the patients (Clark et al., 2011).

However, as discussed above, the pharmaceutical selling context is different to others (Clark et al., 2011), because physicians act as intermediaries in the prescription decision making process, between the pharmaceutical firm's PSR and the patient as the ultimate consumer (Gönül et al., 2001). Therefore, physicians are the customers in this context but not the consumer (Gönül et al., 2001; Miao-Sheng & Yu-Ti, 2008). Many scholars exemplify this context as similar to organisational buying or a purchasing context such as a gift, where the buyer is not the user (e.g. Kotler, 2003) and where buying behaviours are mostly influenced by the price (Krapfel Jr, 1985). Therefore, this research considers Holmlund's (2008) and Huntley's (2006) economic view as a confounding and/or mediating factor rather than an RQ dimension; as a part of an open system that can interact with PSR-physician RQ outcomes.

This is because previous studies have identified that the price of a product or service has no significant effect on the development of buyer-seller RQ. For instance, the findings of the study carried out by Lin (2013) identified that customer's perceived price does not necessarily produce any barrier to the development of RQ with customers. Particularly in a pharmaceutical context, a customer perceives high price as a signal of quality (Gönül et al., 2001). However, Lin (2013) also identified that when customers pay a higher price they seek more relational behaviour (e.g. interaction frequency, customer orientation) from salesperson, which leads to trust in and satisfaction with that salesperson and hence RQ. Moreover, Dorsch et al. (1998) found in their study that many qualified vendors (i.e. those with quality products and with reasonable prices) were excluded from the customer list of vendors on the basis of weak relationship quality. Therefore, economic dimension (i.e. price and/or profit) is more appropriate in firm-to-firm level RQ.

Although the dominant approach to define RQ in interpersonal selling context is based on trust and satisfaction as its dimensions, in recent investigations, commitment also appears to be a vital RQ first order construct (e.g. Morgan & Hunt, 1994). Moreover, Van Tonder et al. (2017) in their study found that all these construct (trust, satisfaction and commitment) should be present to achieve optimum benefits of RQ in terms of receiving customer's favourable behaviour for a service provider (such as loyalty); and in this respect customer's commitment plays a significant role. Particularly, in a pharmaceutical selling context, physician's commitment with a PSR is a necessary condition for his or her products ongoing prescription to future patients. Thus, based on the above discussion, this research adopts the RQ definition of Smith (1998b, p. 4); that RQ is a higher order construct consisting of positive relationship outcomes, i.e. trust, satisfaction and commitment that reflect the strength of the relationship and that meet the expectations of partners.

This definition is consistent with the prior conceptualization of RQ in interpersonal selling context in general and also in the pharmaceutical context (e.g. Clark et al., 2011). Moreover, it has also been argued by Woo and Ennew (2004) that to advance RQ conceptualization, researchers should consider the broader meaning of the term RQ, which is an overall assessment of buyer-seller relationships. Accordingly, attention should be placed on the elements that create RQ as characterized by a degree market or industrial context specificity.

Therefore, having adopted a RQ definition and dimensions for this research; the next task is to critically evaluate the nature of trust, satisfaction and commitment, and to infer the mechanisms they entail. Furthermore, this will help to identify suitable determinants that can influence these RQ dimensions.

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### 2.5.1 TRUST

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Trust is the basis of almost all endeavours to assess relationships (Roberts et al., 2003) and may be the single cornerstone element for the development and maintenance of enduring relationships (Simpson, 2007). Trust is considered as a central dimension of RQ (Moorman et al. 1992) within almost all business contexts, since it is essential to all relational exchanges (Morgan & Hunt, 1994). Morgan and Hunt (1994, p. 23) define trust as "one party's confidence in the exchange partner's reliability and integrity". Similarly, Moorman et al. (1992, p. 315) define trust as "a willingness to rely on an exchange partner in whom one has confidence." Likewise, in the interpersonal selling context Crosby et al. (1990, p. 70) offer an almost identical definition of trust as the customer's confident belief in a salesperson, that he or she can be relied upon to behave in a manner that serves the customer's long-term benefits. It appears from the RQ literature that in order to evaluate trust, studies in different contexts follow the conventions laid by the definitions above, where trust has been viewed in two ways in these definitions (Moorman et al., 1992).

First, trust is viewed as the individual's behavioural intentions, which is the reliance on the benevolence of the partner (Crosby et al., 1990; Kumar et al., 1995; Moorman et al., 1992; Rasila, 2010). This view implies that trust allows individuals to take a risk (McAllister, 1995) on the part of the partner's uncertain anticipation of future actions (Zaheer et al., 1998). The literature on trust in selling contexts suggests that trust is developed in the interaction exchange episodes (Bejou et al., 1998; Boles et al., 2000; Crosby et al., 1990; Osobajo & Moore, 2017b); and is required in the decision making for complex products and/or services, as the customer suffers uncertainty in such situations (Crosby et al., 1990). Therefore, according to this view a salesperson's benevolence for the customer is an important condition to develop the customer's trust in a salesperson (e.g. Hewett et al., 2002; Roberts et al., 2003; Walter et al., 2003). It is referred to as the likelihood that the salesperson would value the customer's interests and welfare as compared to their own (Sanchez-Franco & Rondan-Cataluna, 2010). Such perceived customer confidence in a salesperson's benevolent intentions, for instance customer orientation (Bejou et al., 1996; Wray et al., 1994), is critical to reduce customers' uncertainty level, which enhances a customer's RQ with the salesperson (Shamdasani & Balakrishnan, 2000).

Second, trust is seen as beliefs, sentiments or expectations of the individual in relation to the honesty and the trustworthiness of his/her partner (Crosby et al., 1990; Moorman et al., 1992; Morgan & Hunt, 1994; Rasila, 2010). This requires trust in a partner's (or salesperson's) credibility and responsible behaviour (McAllister, 1995; Moorman et al., 1992). For customers, the credibility at individual's or salesperson's level is the extent to which that individual is reliable, likeable, expert or competent and dependable in a relationship (Holmlund, 2001; Swan et al., 1985). Finally, the product and/or service quality experience of the customer enhances the customer's trust in the credibility of an individual or salesperson and the firm he/she represents (de Ruyter et

al., 2001; Sanchez-Franco & Rondan-Cataluna, 2010). This is because a customer's trust in a salesperson is developed on the basis of the customer's evaluation of promised versus delivered performances (Wray et al., 1994) with respect to product and/or services. Sciarelli et al. (2017) in their study found that the service provider is likely to be more trusted by the customers, once they feel satisfaction with the service provider's conscious efforts in service delivery. Likewise, the salespeople who are experts on their products/or services are likely to be more trusted by the customers (Crosby et al., 1990; Ou et al., 2012) and their product or services are considered to be more reliable, with improved quality assessment (Huntley, 2006). In addition, trust enables customers to exchange their concerns and needs openly, which helps salespeople in better meeting customer needs and consequently enhancing RQ (Boles et al., 2000).

In addition, scholars have also attempted to distinguish interpersonal trust in two distinct but interrelated types, which are cognitive and affective trust (e.g. Arnott et al., 2007; Johnson & Grayson, 2005; McAllister, 1995). Cognitive trust is based more on reasonable knowledge about the partner's reliability and reputation or credibility, which enables predictions about a partner to be made with confidence (Johnson & Grayson, 2005). For example, in selling situations the customer's initial trust is more likely to develop based on his/her knowledge about a firm's or brand's reputation (Ou et al., 2012). Furthermore, it can also be built up on the series of previous interaction episodes, whereby a salesperson behaved in reliable, competent and dependable manners (Arnott et al., 2007). Therefore, it can be argued that cognitive trust is linked with the beliefs or the sentiments of customers, emerging from a customer's knowledge about a salesperson's trustworthiness, his/her firm and product or service performances. This positive reinforcement from the cognitive trust of a customer engenders self-interest mechanisms (Smith, 2011), as the customer feels confident with the products or services provided, resources used and the reliable conduct of salesperson, which will fulfil his or her future needs and long term interests (Shamdasani & Balakrishnan, 2000). This consequently enhances the RQ between salesperson and customer because the customer 'believes' the relationship with the salesperson is valued enough to continue it.

Affective trust on the other hand is based on emotions that arises from a customer's supposed personal experience with the salesperson's care and obligations (Johnson & Grayson, 2005; McAllister, 1995). Affective trust provides the customer with a sense of security and strength in the relationship (Johnson & Grayson, 2005) due to emotional bonds developed through the benevolent conduct of the salesperson during interactions with the customer (Arnott et al., 2007). Therefore, it can be proposed that the customer's affective trust in a salesperson can generate affective or emotional mechanisms. Since a customer is exposed to the salesperson's genuine care and concern for their welfare during ongoing service delivery (Johnson & Grayson, 2005), these emotional mechanisms in turn bind the customer to maintaining the relationship with the salesperson or elicit the customer's commitment to that relationship.

Smith (2011, p. 79) discusses that "the self-interest and/or emotional mechanisms to trust are not mutually exclusive. For any trust relationship, any combination of these elements may be simultaneously coactive. Indeed, the simultaneous cooperation of these mechanisms is often necessary and different types of trusting relationships may be based upon different mechanisms to varying degrees".

Therefore, it can be expected that at an interpersonal level, trust between customer and salesperson both cognitive or self-interest and affective or emotional mechanisms can exist, which emerge from salesperson's trustworthiness and benevolent conduct perceived by the customer.

Thus, based on the above evaluations this research follows Crosby et al. (1990, p. 70) definition of trust -, which is the customer's confident belief that a salesperson, can be relied upon to behave in a manner that serves the customer's long-term benefits. Furthermore, this research also relies upon the above discussed assumptions that a PSR's trustworthiness, competency and expertise, benevolent intentions and sincerity with the physician can engender both cognitive and affective trust. That is to say, the PSR's trustworthiness, competency and expertise in product or service delivery and error-free interactions with physician can lead to his/her cognitive trust in the PSR. Affective trust, however, is based on emotions that arises from a customer's (or physician's) personal experience with the salesperson's (or PSR's) care and obligations (Johnson & Grayson, 2005; McAllister, 1995). Both these kinds of trust develop over time and entail the self-interest and emotional mechanisms that engender a physician's trust in the PSR, which in turn bind the physician to maintaining a relationship with the PSR and make him/her more likely to take a risk based on the information the PSR's supplies. Therefore, physician's trust in a PSR is considered an essential dimension of PSR-physician's RQ, which can influence the physician's prescription decision making.

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### **2.5.2 SATISFACTION**

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Satisfaction is a multi-dimensional construct that is considered a necessary condition for relationship quality (Bejou et al., 1998; Crosby et al., 1990). Crosby and Stephens (1987) discuss that customer satisfaction can emerge from three different levels: satisfaction with interpersonal interaction; satisfaction with an intangible aspect such as service; and satisfaction with the firm. They found that although all three aspects contribute to overall relationship satisfaction, it was satisfaction with the key service that had the largest effect on overall customer satisfaction with the salesperson and the firm. However, many scholars also suggest that satisfaction can also be influenced by tangible aspects such as product quality (e.g. Elsässer & Wirtz, 2017; Johnson & Grayson, 2005; Parsons, 2002). Therefore, this research, along with other factors suggests that product quality is also considered vital element to achieve customer satisfaction.

Westbrook and Oliver (1991) define satisfaction as an emotional state generated cognitively by a comparison of two processes: firstly, the customer expectation of

service performance. Secondly, an emotional evaluation of the performance actually achieved during consumption. In the selling context, a customer develops emotional feelings towards salesperson when he/she evaluates the error-free efforts of the salesperson in maintaining the relationship and gets positive feedback from his or her appraisal of the salesperson's efforts. The interpersonal quality of the interaction between customer and service provider influences customer satisfaction; however, customer satisfaction will be achieved only if the quality of product or service performance meets the customer's prior expectations (Shamdasani & Balakrishnan, 2000).

This is because a customer's cognitive and affective assessment is the result of their experiences throughout all the interactions in a relationship (Storbacka et al., 1994), the sense of satisfaction engendered at each stage develops a perception of equity, which in turn builds confidence that the partner will deliver on future obligations (Ganesan, 1994). However, as Roberts et al. (2003) found, unsatisfied customers are less likely to develop a relationship with services providers, because a customer's satisfaction with the service provider develops trust, which leads to his/or her commitment to the service provider (Sciarelli et al., 2017). Therefore, satisfaction is an essential construct and necessary condition in order to develop RQ with the customer (Bejou et al., 1998). Customer relationship satisfaction has an impact on customer retention and loyalty through its impact on trust and commitment (Caceres & Papparoidamis, 2007; Hennig-Thurau et al., 2001). In that sense customer's satisfaction with a salesperson is a fundamental condition for the existence of his or her trust and commitment with the salesperson. Therefore, because customers evaluate salespeople across many dimensions, it is likely that cognitive and affective trust are the outcomes of perceptions of satisfaction (Johnson & Grayson, 2005). Hence, it can be expected that satisfaction also entails both cognitive and affective or emotional mechanisms.

Thus, based on the discussions above, this research considers satisfaction to be an emotional state of a customer that develops through his or her overall cognitive and affective assessments about a salesperson in a relationship. It can be anticipated that a physician's overall evaluations and satisfaction with the PSR's interactions, product/service he or she offers and the firm he or she represents can engender both cognitive and affective trust, which entails both the self-interest and emotional mechanisms that engender the physician's trust in and commitment to the PSR. Therefore, customer's satisfaction with a salesperson develops alongside trust, which leads to his or her commitment to the salesperson. Thus, a physician's satisfaction with the PSR is considered to be an essential dimension of PSR-physician RQ.

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### **2.5.3 COMMITMENT**

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Commitment is another important construct in relation to RQ (Ivens & Pardo, 2007) and critical for successful relational exchanges between firms and their partners (Gundlach et al., 1995; Morgan & Hunt, 1994). Commitment is an essential factor for maintaining

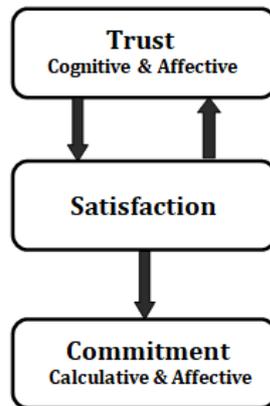
RQ (Parsons, 2002) since it expresses a value judgment and maintains the relationship, as the partners involved are willing to make certain efforts in order to preserve the relationship (Ivens & Pardo, 2007). Thus, it is the wish of the partners for relationship continuity demonstrated by their willingness to invest resources (e.g., assets, time, efforts) into a relationship (Gounaris, 2005).

Moorman et al. (1992, p. 316) define relationship commitment as "an enduring desire to maintain a valued relationship". However, Hennig-Thurau and Klee (1997, p. 752) view commitment as a combination of both emotional and rational benefits, encompassing evaluation of the relationship by the customer and defined as a "customer's long-term orientation towards a relationship grounded on both an emotional bond to the relationship (affective aspect) and on the conviction that remaining in the relationship will yield higher net benefits than terminating it (cognitive or calculative aspect)". Therefore, it represents strong relational (Dwyer et al., 1987), as well as emotional bonds (Hennig-Thurau & Klee, 1997) between partners. Likewise, parallel to affective and cognitive trust, Kumar et al. (1994) viewed commitment in two forms, which are affective and calculative commitment.

Calculative commitment is based on exchange partners motivation to stay in the relationship because of the resources they possess from each other that cannot be replaced easily in case of a termination of the relationship (de Ruyter et al., 2001). It is a rationally based commitment because it considers cost-or-benefit calculations (Hennig-Thurau, 2000). Affective commitment conversely is based on the positive sentiments of the customer toward the seller (de Ruyter et al., 2001). The customer develops these emotions through the quality of interaction with the seller and also with the excellent product/service quality (Hennig-Thurau, 2000). These continuous episodes of interpersonal interaction fulfil the customer's social needs and efforts made by the seller create emotional bonds and thus lead to affective commitment (Hennig-Thurau & Klee, 1997). For instance, in building and maintaining strong relationship quality, a salesperson's (i.e. a PSR) commitment to the relationship in terms of relationship investment (i.e. time, efforts and resources etc.) is an important factor (Wong & Sohal, 2002). The salesperson, by delivering excellent product or service quality and by effective relationship management helps customers in developing trust in, and satisfaction with, the salesperson, thus leading to the customer's affective and cognitive commitment to a salesperson (Gounaris, 2005).

Commitment cannot exist without trust between the partners (Naudé & Buttle, 2000). Furthermore, affective commitment is also mostly influenced by the presence of trust between partners (de Ruyter et al., 2001; Gounaris, 2005). Prior research reveals that only affective commitment influences the customer's intention for relationship maintenance with a firm (Roberts et al., 2003) due to its impact on the customer's attitudinal and behavioural loyalty (Čater & Čater, 2010). Therefore, trust is a major antecedent (or determinant) of relationship commitment (Morgan & Hunt, 1994; Ou et al., 2012). Additionally, Van Tonder et al. (2017) found in their study that a customer's

commitment not only depends on trust but also the extent to which the customer is satisfied with the service provider. Further, because cognitive and affective trust are potentially the outcomes of perceptions of relationship satisfaction (Johnson & Grayson, 2005), it is likely that both trust and satisfaction with a salesperson engender the customer's cognitive and affective commitment. This process is outlined below in figure 2.3.



**Figure 2.3. The interrelationship between trust, satisfaction and commitment**

Thus, based on the aforementioned discussion, this research follows Hennig-Thurau and Klee (1997, p. 752) definition of commitment as-""customer's long-term orientation towards a relationship grounded on both an emotional bond to the relationship and on the conviction that remaining in the relationship will yield higher net benefits than terminating it"". Calculative commitment can be based on physician's cognitive evaluations regarding the rational benefits that the physician achieves (such as quality of information and product) by maintaining the relationship with a PSR. Affective commitment can be developed through the physician's emotional feelings that are engendered through the PSR's personal care, obligations, benevolent intentions and sincerity with the physician. Together calculative and affective commitment entail self-interest and emotional mechanisms, which in turn bind the physician to maintaining the relationship with the PSR in terms of physician's prescriptions for the PSR's product. Therefore, a physician's commitment to a PSR is considered an essential dimension of PSR-physician RQ that can influence the physician's prescription decision making. Moreover, previous studies provide the evidence that when customers are satisfied with the services received, they are able to trust in the service provider and show commitment to remain in the relationship by demonstrating the favourable behaviour to the service provider (Van Tonder et al., 2017).

In summary, from the above discussion it should be understood: that although these constructs i.e. trust, satisfaction, and commitment are distinct in nature, they are interrelated and comprise RQ (Giovanis et al., 2015). Therefore, it can be anticipated that RQ entails both cognitive and affective mechanisms. The three components of RQ

(trust, satisfaction, and commitment) and the mechanisms (cognitive and affective) they can entail are summarized below in table 2.4.

*Table 2.4. RQ dimensions and its mechanisms*

<b>RQ Dimensions</b>	<b>Mechanisms</b>
<b>Trust</b>	Customer's trust in salesperson can entail both cognitive or self-interest and affective mechanisms, emerging from salesperson's trustworthiness and benevolent conduct.
<b>Satisfaction</b>	Customer's satisfaction with salesperson emerges from customer's overall cognitive and emotional evaluation of error-free product and service encounter, thus entails cognitive and affective mechanisms.
<b>Commitment</b>	Both customer's trust in and satisfaction with salesperson engenders customer's calculative and affective commitment. Thus, fostering cognitive or self-interest and affective mechanisms.

Having identified the mechanisms that RQ dimensions can entail, the following section evaluates and identifies the determinants that are required to influence these constructs to develop RQ between PSR and physician in the context of Pakistan.

## **2.6 THE DETERMINANTS OF RELATIONSHIP QUALITY EMPLOYED IN INTERPERSONAL SELLING CONTEXT**

The last section discussed the nature of trust, satisfaction and commitment as RQ dimensions and also the mechanisms they entailed that lead to certain performance objectives, which is pivotal for buyer-seller exchange relationships. However, RQ is not engendered by itself, the determinants of RQ influence RQ and its dimensions (Ou et al., 2012). It has already been discussed that there may be many factors that contribute to the development of strong quality buyer-seller relationships; however, it may depend on the nature of the organization, the individuals who represent the organization and the situational factors around it (Parsons, 2002). In essence the determining factors of RQ are contingent on wider contextual factors (Hewett et al., 2002; Naudé & Buttle, 2000). For that reason it appears from RQ literature that scholars have investigated the significance of a diverse range of determinants influencing RQ suitable to the context of their studies and therefore there is no general agreement on RQ determinants (Izogo, 2016a). Thus, the task of this section is the identification of the determinants that are important to developing PSR-physician interpersonal RQ, which are also relevant in the context of Pakistan.

In the interpersonal selling context (albeit in a firm-to-firm or consumer context), scholars have identified salespeople's varied relational and personal characteristics as important determinants to developing RQ with customers. For example, in services context Crosby et al. (1990) identify that a salesperson's relational selling behaviour (i.e. interaction frequency, cooperation and mutual disclosure) and personal characteristics (such as similarity and expertise) are important to influencing a customer's trust in and satisfaction with the salesperson. Similarly, Palmer and Bejou

(1994) investigate customer orientation, selling orientation, expertise, and ethics as influences on trust and satisfaction. Likewise, Wray et al. (1994) and Bejou et al. (1996) examine the impact of customer orientation, selling orientation, expertise, ethics and relationship duration on trust and satisfaction. Boles et al. (2000) just replicate the study by Lawrence A. Crosby and colleagues in 1990 by adding equity found trust and satisfaction as important dimensions of RQ.

Likewise, Smith (1998a) considers relationship investment and open communication to be aspects of relationship management, and life-stage, gender, cultural background, work attitude and personality as aspects of similar importance to influencing trust, satisfaction and commitment. In another study Smith (1998b) added relationship bonds (i.e. structural, social and functional) to her previous study as an RQ determinant and found that social bonds have a significant impact on trust, satisfaction and commitment. Similarly, Mullins et al. (2014) examined self-efficacy, similarity and customer orientation as important RQ determinants that have significant impact on trust, satisfaction and commitment.

Although there is a limited consensus on the determinants of RQ (Izogo, 2016a), a few salesperson's relational and personal characteristics are more frequently used by different scholars as the important RQ determinants, as shown in table 2.5.

**Table. 2.5: RQ determinants used in interpersonal selling context**

<b><i>Determinants of RQ</i></b>	<b><i>Study</i></b>
Interaction Frequency	(Boles et al., 2000; Crosby et al., 1990; Lagace et al., 1991; Lin, 2013; Rose, 2018)
Cooperation	(Boles et al., 2000; Crosby et al., 1990; Rose, 2018; Smith, 1998b)
Mutual Disclosure	(Boles et al., 2000; Crosby et al., 1990; Lin, 2013)
Similarity (between salesperson & customer e.g. shared values, culture, sex, life stage)	(Boles et al., 2000; Crosby et al., 1990; Mullins et al., 2014; Smith, 1998b)
Expertise	(Bejou et al., 1996; Boles et al., 2000; Clark et al., 2011; Crosby et al., 1990; Izogo, 2016b; Lagace et al., 1991; Ou et al., 2012; Smith, 1998a, 1998b)
Ethics or Ethical behaviour	(Bejou et al., 1996; Lagace et al., 1991; Ou et al., 2012)
Relationship Duration	(Bejou et al., 1996; Lagace et al., 1991; Smith, 1998b)
Customer Orientation	(Bejou et al., 1996; Izogo, 2016a, 2016b; Mullins et al., 2014)
Selling Orientation	(Bejou et al., 1996)
Social Bonds	(Smith, 1998a)
Relationship Investment	(Clark et al., 2011; Smith, 1998a, 1998b)
Communication	(Smith, 1998a, 1998b)
Equity	(Boles et al., 2000)
Corporate Reputation	(Ou et al., 2012)
Relationship Benefits	(Clark et al., 2011)
Relationship Dependence	(Clark et al., 2011)
Product/Service Quality	(Caceres & Paparoidamis, 2007; Čater & Čater, 2010; Giovanis et al., 2015; Roberts et al., 2003; Wong & Zhou, 2006)
Empathy and Listening Behaviour	(Itani & Inyang, 2015)
Language Divergence	(Balaji et al., 2017)

***[Source: Author's compilation]***

For example, salesperson's personal attribute such as salesperson's expertise of the product/or services (e.g. Bejou et al., 1996; Boles et al., 2000; Clark et al., 2011; Crosby et al., 1990; Lagace et al., 1991; Ou et al., 2012; Smith, 1998a, 1998b), ethics or ethical behaviour (e.g. Bejou et al., 1996; Lagace et al., 1991; Ou et al., 2012), salesperson-customer similarity (e.g. Boles et al., 2000; Crosby et al., 1990; Mullins et al., 2014; Smith, 1998b). Similarly, relational characteristics such as contact or interaction frequency (e.g. Boles et al., 2000; Crosby et al., 1990; Lagace et al., 1991; Lin, 2013), cooperation (e.g. Boles et al., 2000; Crosby et al., 1990; Smith, 1998b) and mutual disclosure (e.g. Boles et al., 2000; Crosby et al., 1990; Lin, 2013) are considered as important determinants to developing RQ with customers. Therefore, based on the above discussed RQ determinants that have been employed by scholars in different interpersonal selling contexts, the aim of subsequent section is the identification of RQ determinants suitable to Pakistan's pharmaceutical interpersonal selling context.

## **2.7 THE RQ DETERMINANTS IDENTIFICATION FOR PAKISTAN'S PHARMACEUTICAL INTERPERSONAL SELLING CONTEXT**

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In the pharmaceutical interpersonal selling context, Lagace et al. (1991) identified a few of the identical determinants as discussed above in other selling contexts and outlined in table 2.5. They found that the PSR's expertise, ethical behaviour and contact frequency had significant impact on RQ. Clark et al. (2011) identified relationship benefits (i.e. companionship and information services provided by a PSR to physician), relationship investment (investment of time, effort and spending), relational dependence and PSR's expertise as the most important determinants that influence RQ with physicians.

However, whilst the PSR's personal and relational characteristics are very important to cultivate the quality relationships with physicians, product quality and firm's image or reputation are also crucial in the pharmaceutical context (Scharitzer & Kollarits, 2000). However, it has also been argued that product and/or-service quality is merely an entry condition (e.g. Crosby et al., 1990). Nevertheless, in some contexts, such as in pharmaceutical selling, product quality is a vital aspect because for the physician, the ultimate goal is the early recovery of his/her patient (Lagace et al., 1991). Therefore, if a product fails to improve the patient's condition, it might deteriorate the physician's trust in the PSR and satisfaction with the information exchanged. Product quality has not been taken into account in previous studies in the pharmaceutical selling context.

Moreover, previous studies on RQ have mainly been conducted in US, UK and other western developed countries (Asnai et al., 2009; Osobajo & Moore, 2017b) including those conducted in a pharmaceutical setting (e.g. Clark et al., 2011; Lagace et al., 1991). In these contexts, issues related to product quality are ensured by the monitoring of different institutional mechanisms as compared to the developing countries, such as Pakistan, where the governmental and institutional mechanisms for health regulations

are weak and inefficient (Ehsan & Ashill, 2014). Furthermore, in Pakistan there are more than 400 licensed pharmaceutical companies (including national and multinationals) operating and the total number of registered pharmaceutical products was more than 40000 in 2012 (Chandio, 2012). This can create uncertainty in the prescription decisions related to the quality of a particular product category promoted by different pharmaceutical firms' PSRs.

One mechanism to reduce this uncertainty is the firm's positive image in terms of educational services offered to the physicians and their patients. A firm's positive reputation is similar to brand equity that creates customer trust in a firm and in the salesperson as a representative of that firm (Ou et al., 2012). Therefore, along with PSR's personal (i.e. product, knowledge, ethical behaviour) and relational characteristics (such as frequent visits, relationship investments), other factors, such as the product's quality that a PSR is promoting and the firm's image that a PSR is representing might also be important to develop PSR's RQ with physicians in the context of Pakistan. Furthermore, in terms of an open system inquiry it is essential to take in to the account all entities within the pharmaceutical selling structure (i.e. PSR, the product he or she promotes and the firm he or she represents), which possess their causal forces and can influence the PSR-physician's RQ. Thus, based on the prior conceptualizations discussed above and considering the assumptions of an open system inquiry, the following key determinants are identified for this research: i.e. firm's image, product quality, visit frequency, relationship investment, ethical behaviour and PSR's expertise. The subsequent sections consider the inter-relationship between the identified determinants that leads to RQ (i.e. trust, satisfaction and commitment).

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### **2.7.1 FIRM'S IMAGE:**

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Customers' perception of a firm's image or reputation has been defined as the extent to which a customer believes that a supplier firm is fair, honest and concerned about its customers' goodwill (Doney & Cannon, 1997, p. 37). It is not only based on word-of-mouth and other firms in the industry (Doney & Cannon, 1997); but also customer's long-term assessment of a firm's positive actions and performances in favour of a customer that engenders customer's trust and satisfaction with a given firm (Ou et al., 2012). In the pharmaceutical context, a firm's positive reputation emerges with the delivery of excellent products and educational services offered to the physicians (Scharitzer & Kollarits, 2000). For instance, pharmaceutical firms may provide physicians with free samples, educational materials, support for conferences and symposia and funding for continuing educational programmes. Physicians view these actions or services of a pharmaceutical firm as beneficial for themselves and ultimately for their patients as well (Andaleeb & Tallman, 1996; Wright & Lundstrom, 2004). Thus, it leads to a physician's positive perception about a firm's image, trust in and satisfaction with a pharmaceutical firm.

A customer's judgment of the positive reputation and trust in a firm has a great influence on customer's trust in a salesperson through a mechanism of transference (Johnson & Grayson, 2005; Ou et al., 2012) and as a source of a credible firm. This implies that the physician's perception of the firm's reputation (or credibility) that a PSR represents has direct impact on the development of the physician's trust in the PSR and also the future relationship between them (Wright & Lundstrom, 2004). According to Doney and Cannon (1997), source credibility has significant associations with trust and buying decision-making, since a communicator is perceived to be a source of valid assertions (i.e. credible). Physicians are the customers of pharmaceutical firms and prescribe the firm's products for the betterment of their patients. Therefore, a firm's image is a part of the physician's perception of a PSR as a credible source of information, and is an important factor to a physician (Wright & Lundstrom, 2004). Therefore, it can be anticipated that a PSR's firm image has a direct relationship with the physician's trust, satisfaction and hence RQ with the PSR.

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### **2.7.2 PRODUCT QUALITY:**

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The existence of the product in an exchange relationship is a necessary condition for the instigation of a relationship around it (Čater & Čater, 2010). Customers do not show their motivation for continuing the relationship wholly because of a relationship itself unless they also receive a quality product that matches the customers' expectations by adding value in one way or another (Human & Naudé, 2014). This implies that whilst a salesperson's quality of interaction fulfils the social needs of customers, the quality of the product is necessary for their rational (Elsässer & Wirtz, 2017) or technical need fulfilment (Hennig-Thurau & Klee, 1997). While judgements on RQ will be made based on the quality of customer/salesperson interaction, product or service quality may also be influential (Bejou et al., 1998). Therefore, it is probable that the customer will associate the performance of a product with the salesperson, which will affect the customer's trust in the salesperson (Johnson & Grayson, 2005). For instance, in pharmaceutical sales, product related quality is a vital aspect because for the physician the ultimate goal is the early recovery of his/her patient. Patient's response to the particular product engenders a physician's trust in a PSR and satisfaction with the information exchanged about the product that a PSR is promoting (Lagace et al., 1991). Therefore, product related quality perception can lead to trust and satisfaction and can be interpreted as a determinant of RQ (Wong & Zhou, 2006). Moreover, it has been confirmed more recently by Čater and Čater (2010) that product related quality is a necessary determinant for successful and quality business relationships that influence the buyers commitment. Therefore, it can be anticipated that a PSR's product quality has a direct relationship with physician's trust, satisfaction, commitment and hence RQ with the PSR.

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### **2.7.3 CONTACT OR VISIT FREQUENCY:**

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Contact frequency is another important determinant, which is considered by many scholars in their studies when modelling RQ in sales contexts (e.g. Boles et al., 2000; Crosby et al., 1990; Lagace et al., 1991; Lin, 2013). It refers to the salesperson's frequency of face-to-face or indirect communication with customers for either personal or business reasons (Crosby et al., 1990). The pharmaceutical context is characterized by PSRs' frequent interactions with physicians, which are needed to keep physicians updated about rapid changes in the industry (e.g. new products, product uses and interaction, and educational services etc.) (Lagace et al., 1991). A salesperson's frequent interaction with a customer engenders the customer's trust in the salesperson (Doney & Cannon, 1997). As a result, customers view salespeople as a source of information (de Ruyter et al., 2001) and salesperson's frequent interactions provide the customer more of the necessary information, which reduces the customer's uncertainty and leads to a quality relationship (Leuthesser, 1997). Therefore, frequent interactions provide better opportunity for PSRs to provide information critical to the success of the relationship (Lagace et al., 1991).

Furthermore, visits to a customer provide a salesperson's social settings opportunities, in which a more productive information flow can be developed (Doney & Cannon, 1997). This is because such interpersonal interactions enable the salesperson to collect information regarding the customer's personal and professional needs, which is helpful in building a closer interpersonal relationship (Crosby et al., 1990). This implies that visits not only fulfil the physician's product or service related technical needs, but also the physician's social needs. Therefore, interaction with the physician might give him/her a sense of obligation and importance and commitment towards the PSR, developing an ongoing relationship (Crosby et al., 1990). That leads to the customer's (or physician's) affective commitment for a salesperson (de Ruyter et al., 2001) along with trust (Crosby et al., 1990; Doney & Cannon, 1997) that have significant impact on RQ. Furthermore, Murshid and Mohaidin (2017) as a result of their review of literature found that in the context of developing countries, PSRs frequent interaction with physicians has a significant impact on physicians' prescription behaviour. Therefore, this research proposes that a PSR's appropriate visit frequency influences the physician's trust, satisfaction and commitment and thus RQ with a given PSR.

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### **2.7.4 RELATIONSHIP INVESTMENT:**

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Relationship investment is referred to as the time, efforts and resources devoted to developing and maintaining a relationship (Smith, 1998b). Although relationship investment makes a good reflection of the firm's commitment to the customer (Keating et al., 2003) however, the resources invested are irrecoverable once the relationship terminates (De Wulf et al., 2001). However, such investments generally generate an expectation of reciprocation which provides strength and continuity to a relationship and, therefore enhances trust, satisfaction and commitment (Palmatier et al., 2006).

PSR visits to the physicians in their areas are the main elements of relationship management (Scharitzer & Kollarits, 2000). They spend their time in travelling, communication and provide many other benefits (such as educational materials, free product's samples, funding for continuing educational programmes, support for conferences and symposia), which are provided by the pharmaceutical firms through their PSRs who are the primary point of contact with physicians (Andaleeb & Tallman, 1996). These PSR relationship investments removes the physician's uncertainty (Smith, 1998b), which creates the emotional or psychological mechanisms through the development of trust, satisfaction and commitment (Palmatier et al., 2006) that has direct positive influence on RQ (Clark et al., 2011). Therefore, this research proposes that higher relationship investment by a PSR influences the physician's trust in, satisfaction and commitment and thus RQ with the PSR.

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#### **2.7.5 SALESPERSON'S ETHICAL SELLING BEHAVIOUR:**

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The interpersonal interaction implicit in personal selling makes it the setting for the transaction of ethical codes of conduct (Chen & Mau, 2009; Lagace et al., 1991). This is because salespeople normally perform their role in somewhat unsupervised settings, where sales achievements and revenue generation are their primary responsibility, which more often can be very hectic (Chen & Mau, 2009). Therefore, this can lead to the adoption of unethical selling behaviour for short-term gains (e.g. sales increase) on the cost of the customer, such as making false claims about a product or service, giving false information about its availability or spreading disinformation about competitors etc. (Román, 2003). The salesperson's unethical behaviour and short-term goal orientation could subsequently endanger the possibility of developing long-term relationships with customers (Wray et al., 1994). Therefore, there is a general consensus in sales literature that ethical sales behaviour is vital to foster customers' trust in and satisfaction with a salesperson (Cadogan et al., 2009).

A salesperson's ethical behaviour is referred to as the dissemination of truthful and accurate information of products/or services by a salesperson during interaction with the customer (Ou et al., 2012). In the pharmaceutical setting the ethical sales behaviour is particularly important since this context is involved with the wellbeing of the patients and unethical behaviour by a PSR can have unwanted consequences. To avoid such consequences, Lagace et al. (1991) elaborate many possible approaches for a PSR, such as not to exaggerate product information, avoid dispersing falsified information against competitors' brands and also provide the exact information regarding product availability. This is because customers make important decisions on the basis of information provided by a PSR or salesperson (Ou et al., 2012). For example, when the PSR provides an unbiased accounts of a product's efficacy, side-effects and availability, a physician should be able to make an informed prescription and patient relief is more likely to occur. Since communicating relevant and timely information consistently helps customers to perceive salesperson reliability (Morgan & Hunt, 1994), this dissemination of information fosters trust and satisfaction with the salesperson (Lagace et al., 1991).

Further, previous research in different context also provides the evidence that the salesperson's ethical behaviour engenders customer's trust in, and satisfaction with the salesperson (e.g. Chen & Mau, 2009; Ou et al., 2012; Román, 2003; Wray et al., 1994). Therefore, this research proposes that a PSR's ethical selling behaviour fosters the physician's trust in, satisfaction and commitment to a PSR and thus RQ with a PSR.

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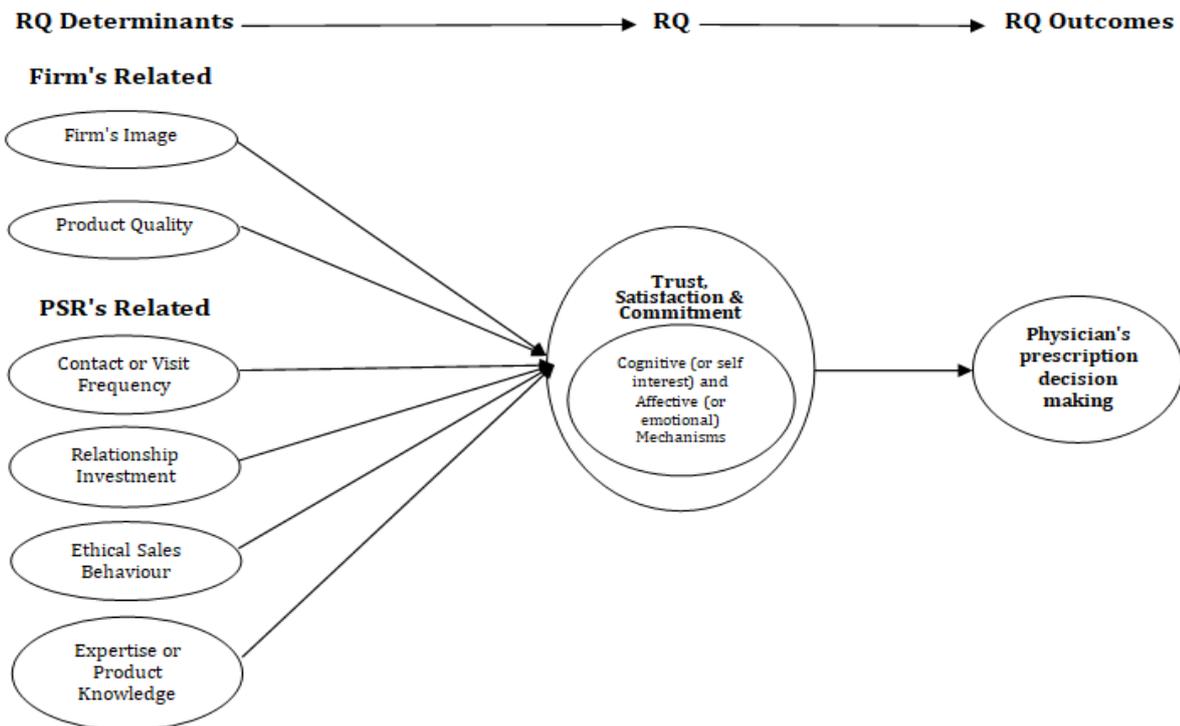
#### **2.7.6 SALESPERSON'S EXPERTISE OR PRODUCT KNOWLEDGE:**

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A salespersons' expertise regarding their products/or services is widely considered as one of the main determinants of RQ by majority of scholars in various sales contexts (e.g. Bejou et al., 1998 etc.; Boles et al., 2000; Clark et al., 2011; Crosby et al., 1990; Lagace et al., 1991; Lin, 2013; Ou et al., 2012). Expertise refers to the degree of knowledge, experience or skills a source possesses related to a specific subject (Lagace et al., 1991, p. 3). A salesperson who holds relevant product/market knowledge is perceived as expert and competent by customers (Crosby et al., 1990). Therefore, when customers interact with an expert salesperson, the value of this interaction increases, and the relationship comes to be perceived as more important, leading the customer to take steps to strengthen and maintain it (Palmatier et al., 2006). Therefore, a salesperson's level of products/or services and selling knowledge is perceived by a customer to create trust and satisfaction, which has a direct positive influence on RQ (Parsons, 2002; Wong & Sohal, 2002).

Similarly, in the pharmaceutical setting expertise refers to the level of knowledge a PSR possesses around the product class he or she is promoting to the physician (Lagace et al., 1991). Ahmed (2016) as a result of his study in the context of Pakistan, found that PSRs' expertise or product knowledge has a significant impact on physicians' prescription decision making. This is because the PSR's expertise provides physicians with a sense of credibility in the information exchanged about a particular product class, which is evaluated highly by the physicians in their prescription decision making (Clark et al., 2011). As a result physicians provide quality care to their patients, which fosters physicians' trust in and satisfaction with a PSR (Clark et al., 2011; Lagace et al., 1991). Therefore, this research proposes that a PSR's product knowledge engenders the physician's trust in, satisfaction and commitment to PSR and thus RQ with a PSR.

In the preceding discussion and review of the existing literature, this research has identified the determinants necessary to build PSR-physician RQ in the pharmaceutical context and proposed their relationships with RQ (i.e. trust, satisfaction and commitment) outlined below in figure 2.4



***Figure 2.4. RQ determinants identified for current research and their inter-relationships***

The prior research on RQ has shown that these constructs have significant influence on RQ (i.e. trust, satisfaction and commitment). This includes the salesperson's characteristics (i.e. salesperson's contact or visit frequency, relationship investment, ethical sales behaviour and expertise) and firm related characteristics (i.e. firm's image and product quality). The task of the following sections is to critically evaluate the PSR-physician's RQ outcomes in terms of physician's prescription decision making in an open system under contingent economic conditions of patients.

## **2.8 THE CONSEQUENCES OR OUTCOMES OF RELATIONSHIP QUALITY:**

RQ has a critical role in the effective management of customer relationships (Wong & Zhou, 2006) to achieve certain performance outcomes (Palmatier et al., 2006; Vieira et al., 2014). Therefore, RQ serves as a mediator between relational input factors (i.e. RQ determinants) from sellers that produce positive outcomes or consequences in customers (Palmatier et al., 2006). Considerable research on RQ has thus reported that the quality of the relationship with customers provides a firm with superior outcomes, such as: sales effectiveness/business share (i.e. objective outcomes), and anticipation of future interaction/or relationship commitment, customer retention, loyalty, word of mouth/recommendations and repurchase intentions (subjective outcomes), as shown below in table 2.6.

**Table 2.6: Outcomes of relationship quality**

<b>Outcomes of RQ</b>	<b>Study</b>
<b>Subjective Outcomes:</b>	
Future Interaction/Commitment	(Boles et al., 2000; Crosby et al., 1990; Wong & Zhou, 2006)
Customer Retention	(Hennig-Thurau, 2000; Hennig-Thurau & Klee, 1997; Hennig-Thurau et al., 2001; Ou et al., 2012)
Customer Loyalty	(Caceres & Paparoidamis, 2007; Čater & Čater, 2010; De Wulf et al., 2001; Giovanis et al., 2015; Hennig-Thurau et al., 2002; Hennig-Thurau et al., 2001; Izogo, 2016a; Prasertchuwong, 2018; Rauyruen & Miller, 2007; Roberts et al., 2003; Shamdasani & Balakrishnan, 2000; Wong & Zhou, 2006)
Word-of-Mouth/Recommendations	(Balaji et al., 2017; Hennig-Thurau et al., 2002; Izogo, 2016b; Ou et al., 2012; Wahid & Ismail, 2017)
Repurchase Intention	(Hewett et al., 2002; Izogo, 2016b; Rauyruen & Miller, 2007)
<b>Objective Outcomes:</b>	
Sales Effectiveness/Business	(Boles et al., 2000; Crosby et al., 1990; Huntley, 2006; Leuthesser, 1997; Palmatier et al., 2006; Palmatier, Scheer, Houston, et al., 2007; Vieira et al., 2014; Wahid & Ismail, 2017)
Share/purchase share	

*[Source: Author's compilation]*

It appears from RQ literature that most studies concentrate on the subjective rather than the objective outcomes of RQ. This is because the majority of scholars assumed that subjective outcomes ultimately lead to objective or financial outcomes (e.g. Vieira et al., 2014). Among these subjective outcomes, the impact of RQ on customer's loyalty as an outcome has been widely investigated and identified by scholars (e.g. Caceres & Paparoidamis, 2007; Čater & Čater, 2010; De Wulf et al., 2001; Hennig-Thurau et al., 2002; Hennig-Thurau et al., 2001; Prasertchuwong, 2018; Rauyruen & Miller, 2007; Roberts et al., 2003; Shamdasani & Balakrishnan, 2000; Wong & Zhou, 2006). A few scholars have also investigated whether RQ has significant impact on customer retention, word-of-mouth, recommendations, and re-purchase intentions, as shown in table 2.6. However, these outcomes can also be considered as a customer's behavioural manifestations that emerge through the customer's loyalty (Sirdeshmukh et al., 2002). Therefore, customer loyalty can be taken as a positive behaviour exhibited by the customer through the repeat purchase of goods/or services and/or holding a favourable attitude towards a firm and its goods/or services (Wong & Zhou, 2006).

Customer loyalty can emerge through the effects of different mechanisms associated to customer's overall satisfaction with a product/or service, personal determinism (or commitment) and social bonding at interpersonal and/or firm level (Oliver, 1999). Furthermore, it also can emerge through the development of psychological bonds that enhance the re-purchase intentions of the customer (Jarvis & Wilcox, 1977). Although different mechanisms that can influence the customer's loyalty may operate simultaneously, Palmatier, Scheer, and Steenkamp (2007) reveal that the customer's loyalty to a salesperson contributes to the overall customer loyalty to a firm. They further found that the loyalty owed to a salesperson has an effect on the financial or objective performance of a selling firm. Since customer's intention to continue buying from the firm may be dependent on the quality of goods/or services, it may also be

dependent on the interaction quality and RQ with the salesperson. Previous research has proved that RQ influences customer loyalty (Shamdasani & Balakrishnan, 2000; Wong & Zhou, 2006). Therefore, it can be expected that salesperson's RQ with the customer can foster positive customer behaviour such as loyalty with a given salesperson through the effect of underlying cognitive and affective mechanisms. Previous research on loyalty has considered customer's loyalty as a measure of re-purchase decision making (Oliver, 1999); thus, it is highly likely that RQ between salesperson and customer influences the customer's purchase decision making that can lead to increased objective or financial performance outcomes for a firm.

However, previous research on RQ reveals mixed findings (Casidy & Nyadzayo, 2017) on the objective outcomes (i.e. sales effectiveness) based on buyer-seller's RQ. For example, Crosby et al. (1990) did not find any noteworthy association between RQ and sales effectiveness and similar results were found by Huntley (2006). On the other hand Boles et al. (2000) found that RQ had a positive impact on sales effectiveness. Similarly, Leuthesser (1997) found that there was a significant correlation between RQ and business share. Furthermore, it has been confirmed by Palmatier et al. (2006) that RQ mostly influenced objective outcomes.

Nevertheless, it appears from RQ literature that the objective outcomes of RQ were seen as a constant conjunction of variables within a stable environment. The reason for the mixed findings on the objective outcomes is perhaps that the previous studies did not consider the impact of external (or contingent) factors on the outcomes mediated through RQ. In addition to the cognitive and affective mechanisms of RQ, there might be other contextual mechanisms that can influence customers' purchase decision making (Hennig-Thurau & Klee, 1997). Further decision making can also be influenced due to the interaction of other relationships in the value chain (Holmlund, 2001). These aspects should also be taken into account in order to verify the effectiveness of RQ and their objective outcomes in particular contexts (Casidy & Nyadzayo, 2017; Hennig-Thurau & Klee, 1997; Odongo et al., 2016).

Therefore, this current research considers the outcomes of PSR-physician RQ, that is physician prescription decision making in an open system where different objects of study (i.e. PSR, physician, product and patient) are considered as entities that hold causal powers and mechanisms; and decision making is made through the interactions of these different mechanisms (Danermark, 2002). The following section examines the mechanisms associated with different entities in the pharmaceutical selling structure and how they interact to produce physicians' prescription decision making as an outcome of PSR-physician RQ.

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### **2.8.1 PHYSICIANS' PRESCRIPTION DECISION MAKING**

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RQ between physician and PSR is very important in the pharmaceutical selling context (e.g. Lagace et al., 1991). These quality relationships create bonds of an intra-

psychological kind (Hennig-Thurau & Klee, 1997) including feelings and emotional states (Al-Alak, 2014). In addition, the social bonds that develop through social interactions between PSR and physician, also serve as mechanisms (Vieira et al., 2008). Previous sections of this chapter have established that the physician's RQ with a PSR fosters cognitive (or self-interest) and affective (or emotional) mechanisms that can lead to a physician's loyalty (i.e. a measure of purchase intentions or decision making) with a given PSR. Loyal customers are less price-sensitive and are less likely to respond to alternative promotional initiatives by defecting to competitors (Stank et al., 2003). In addition, prior research has proved that PSR-physician RQ influences physicians' prescription decision making (e.g. Clark et al., 2011; Lagace et al., 1991). Thus, it can be anticipated that the PSR-physician's RQ influences the physician's intentions in relation to prescription decision making in respect of the PSR's product.

However, the extent to which these behavioural intentions (due to the effect of different mechanisms, i.e. both cognitive and affective) transcend into actual prescription generation (or value adding) activity for a given PSR may be dependent upon their interaction with other mechanisms. The forces or mechanisms determining the prescription decision making of physicians are complex and numerous (Hellerstein, 1998). This is because the pharmaceutical selling setting is different to many other contexts, as the primary decision makers (i.e. physicians) are not the end users of products/or services (Clark et al., 2011). The physician not only has the necessary relationship with a PSR but also with the patient and pharmaceutical product that a PSR promotes.

The patients have a contingent association with a PSR in the pharmaceutical selling structure, as shown below in figure 2.5. Patients cannot affect the physician-PSR relationship directly, but they can produce a set of circumstances that might cause change in a physician's behaviour and thus prescription decision making as an outcome. Because the pharmaceutical product a PSR promotes has a direct, or necessary, relationship with the all other objects of the pharmaceutical selling structure (i.e. PSR, physician and patient) that holds its own causal powers.

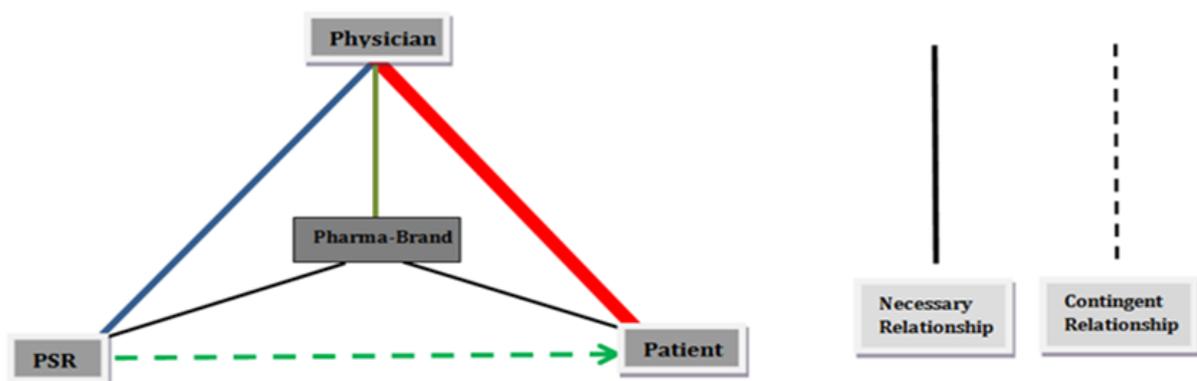


Figure 2.5: Pharmaceutical selling structure and relationships among the objects

Therefore, product characteristics such as product quality have been considered as a necessary determinant for PSR-physician RQ in this research (please see section. 2.4.2.) and product price can influence the physician's prescription decision making in relation to patients' economic conditions. The physician-patient relationship is represented by the thick red line as compared to PSR-physician relationship, which is represented with a thin blue line in figure 2.5.

This is because, the literature on medical marketing suggests that physicians' hold a more favourable attitude towards their patients (e.g. Lundin, 2000). They might consider their relationships with PSR while making prescription decisions; but not at the cost of their patients wellbeing, because they fully understood the notion of conflict of interest and their professional norms (Chimonas et al., 2007). Particularly, physicians' who run private clinics have more inducement to satisfy their patients in order to maintain them as customers, because a self-interest mechanism to retain their patients also exists; as their earnings are dependent upon the number of patients they keep (Granlund, 2009). Therefore, physicians seek to develop and maintain their relationship with patients, which require physicians to gain patients' trust and satisfaction. The patient's satisfaction and trust in a physician can not only emerge from the healthcare decision of a physician against patient's response in terms of early recovery from disease. This can be positively enhanced; for example, if a physician exhibits additional responsiveness and empathy by considering the patient's financial circumstances during their prescription decision making or choice of pharmaceutical product (Gönül et al., 2001). Therefore, patients trust a competent physician who takes appropriate responsibility and control, and makes patient welfare their highest priority (Ehsan & Ashill, 2014). Therefore, consideration of patients' price sensitivity and economic conditions, while accounting for their medical conditions can further improve the physician-patient relationships (Gönül et al., 2001). Thus, it is highly likely to increase in repeat patients patronage and decrease in patient's possible switch to another physician, which is of equal importance for the private physicians (Lundin, 2000).

Patients tendency to choose medical services from private clinics is more common in Pakistan and about 75% of the Pakistani population prefer to seek healthcare services from private physicians (Muhammad, 2014), including both the population of urban and non-urban localities. This is because of insufficient governmental support that results in non-functional primary-care institutions in non-urban areas; and dissatisfaction with healthcare services provided by government health institutes in urban areas (Akram & Khan, 2007). This increases the overall cost of treatment (including the cost of a physician's services and drugs) for patients in Pakistan. Pakistan, like other developing countries, has no publicly funded health system and the majority of patients are not members of any health insurance provider and thus bear all, or part, of the cost of treatment and drugs. This context is likely to influence the prescription behaviour of physicians due to patients' poor economic conditions in some cases; thus this can interact with the PSR-physician RQ outcomes. Therefore, in the case

of a higher price product a PSR promotes this might interact with the patient's economic situation or affordability - altering the physician's behaviour and thus prescription decision making. Hence the mechanisms (cognitive and affective) created by RQ (i.e. physician's trust in, satisfaction and commitment with the PSR) are dormant within that broader 'time-space' and mechanisms related to a patient's economic situation (i.e. non-affordability), pricing and physician's self interest to maintain relationship with the patient. Thus it can result in the substitution of the PSR's product with the alternative product of similar category at a lower price that a patient can afford (Al-Areefi & Hassali, 2013); even though the physician experiences uncertainty about the substitute's efficacy due to its lower price. Thus, it can also be anticipated that higher-product price in relation to patient's economic conditions can influence PSR-physician's RQ outcomes negatively in terms of physician's prescription decision making.

However, a PSR's RQ with physician might enable PSR's inclusion in physician's priority list, as suggested by Dorsch et al. (1998) who found that customers include vendors in their priority list on the basis of RQ. Furthermore, given the behavioural loyalty intentions due to the presence of cognitive and affective mechanisms there is always a chance that a physician recommends the pharmaceutical product that a PSR promotes if appropriate to a patient's economic conditions or requirement to treat a patient's disease. This is because, physicians interact with patients from different economic backgrounds and with different medical needs; in practice, most often physicians regard a higher price product to have more efficacy and hence prescribe it to patients with critical medical conditions (Gönül et al., 2001) as well as those patients who can afford higher-price products (Al-Areefi & Hassali, 2013). This is because patients' wellbeing and early recovery from disease is the physician's priority.

Therefore, based on the discussion above, it can be anticipated that PSR-physician's RQ outcome (that is, prescription decision) is contingent upon the patient's economic and medical condition. There might be an inconsistent relationship between PSR-physician RQ and a physician's actual prescription decision making. Since there are various mechanisms operating in this context, prescription decisions that might be made on the activation of certain mechanisms as shown below in table 2.7.

**Table 2.7: Mechanisms generated by different objects of pharmaceutical selling structure**

<b>Objects</b>	<b>Mechanisms</b>
<b>PSR-Physician RQ</b>	Trust, satisfaction and commitment = Cognitive (or self-interest) and affective (or emotional) mechanisms (please see table. 2.4)
<b>Pharmaceutical Product Price Variation</b>	Higher and lower prices = efficacy and clinical-experience
<b>Patient-physician relationship</b>	Patient's wellbeing, early recovery from disease, physician's self-interest to keep patients
<b>Context</b>	Patient's economic condition (affordability), patient's medical condition need for quality product)

## **2.9 SUMMARY, FINDINGS AND INITIAL CONCEPTUAL FRAMEWORK**

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The review of literature has identified that RQ has emerged as a central construct in successful business relationships; however, so far, there is no generally accepted framework (Hennig-Thurau & Klee, 1997; Holmlund, 2008). The studies on RQ have been done in different research settings and the majority are empirically rigorous, yet there is no consensus on its formal definition (Izogo, 2016b). It has also been identified that there is consensus that RQ is a higher-order or meta-construct consisting of several distinct, but interrelated, dimensions; and there is some consensus among scholars on its dimensions (e.g. trust, satisfaction and/or commitment) to measure RQ. However, a few scholars have also drawn attention to considering the technical (i.e. product-and/or service) and economic (i.e. profit or price) dimensions in RQ conceptualization in the business-to-business context. It has been argued by many scholars that RQ studies have focused more on intangible aspects of relationships, e.g. service quality and communication etc. Little attention has been paid to its tangible aspects, such as product related quality, pricing, and resource exchange (Hennig-Thurau & Klee, 1997; Holmlund, 2001, 2008). Such issues are vital aspects in business exchange relationships (Holmlund, 2001, 2008; Huntley, 2006). To this end, by recognizing the focus (i.e. the nature of relationship) of different studies; three different contexts were identified from the literature where RQ is mostly studied and defined. Subsequently, after comparing the nature of different relationships and discussing the important role of PSR's as a focus of the current research in pharmaceutical selling, RQ is defined as a higher order construct consisting of positive relationship outcomes, i.e. trust, satisfaction and commitment that reflect the strength of the relationship and that meet the expectations of partners (Smith, 1998b, p. 4). Additionally, the current research views economic factors such as product price as an important factor that can interact with the intra-psychological mechanisms of RQ in the buying decision making of a customer.

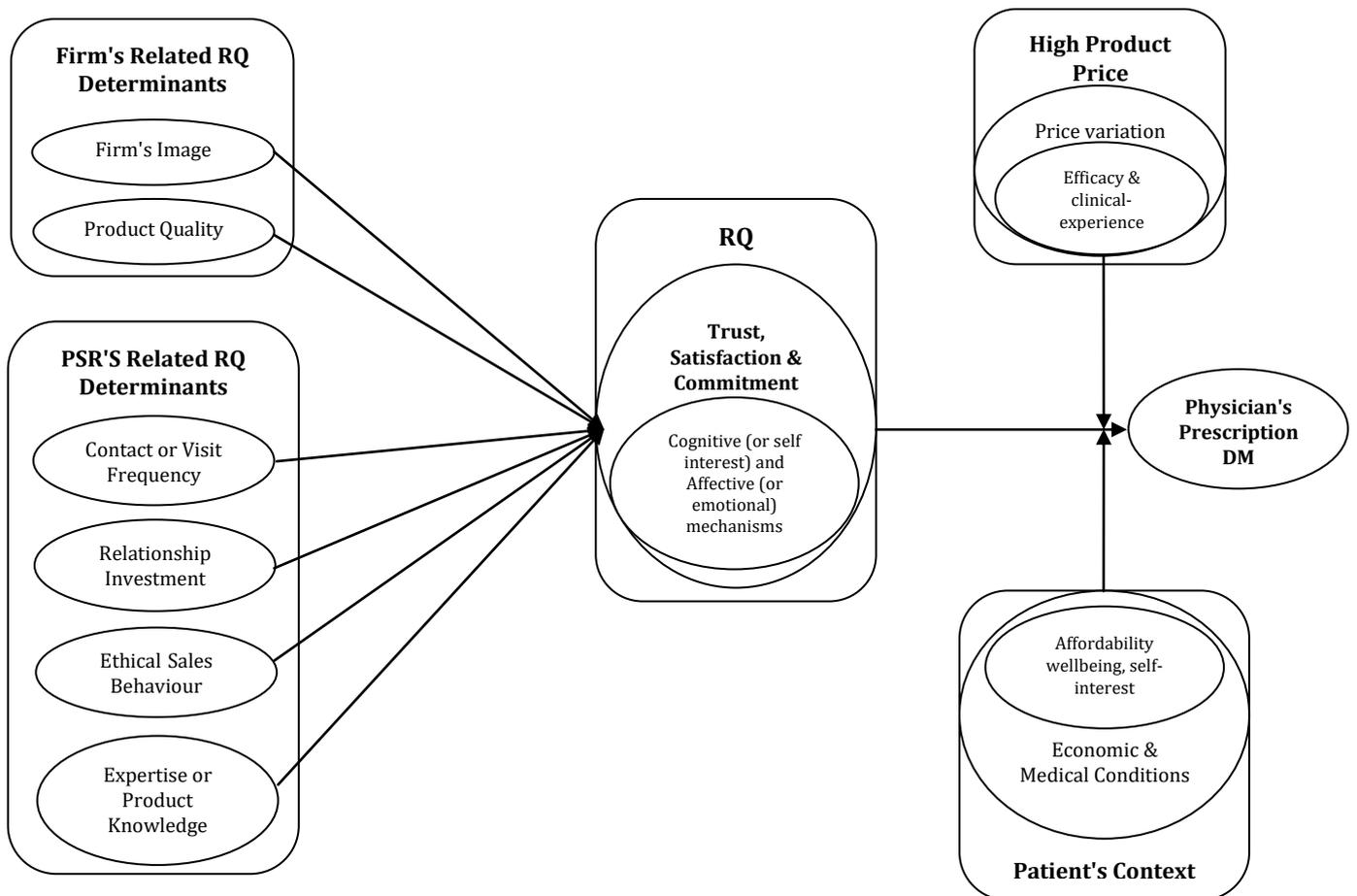
Although RQ has emerged as a central construct in successful business relationships, it appears from the literature that some aspects of the notion of RQ need further explanation. In particular, studies on RQ in an interpersonal context have focused on salesperson's personal and relational characteristics but have not considered the firm's specific factors. These factors can possibly interact with the salesperson's personal and relational characteristics and can also influence RQ. Therefore, this research considers the firm's related characteristics (such as firm's reputation and product quality) along with a PSR's personal and relational characteristics (such as contact frequency, relationship investment, ethical sales behaviour and expertise) as necessary determinants of PSR-physician RQ in the context of Pakistan. No research has been undertaken in this context to date and studies on RQ in the pharmaceutical selling context are rare, so there is a need to identify the factors that can influence RQ between the PSR and physician (Lagace et al., 1991) in different contexts.

Finally, the chapter discussed the consequences, or outcomes, of RQ. It has been confirmed by many scholars that RQ between partners has a great impact on both the

subjective (i.e. anticipation of future interaction/or relationship commitment, customer retention, loyalty, word-of-mouth/recommendations and repurchase intentions) and objective performance outcomes (i.e. sales effectiveness/business share) of the firm. However, it appears from the literature that RQ objective (or financial) outcomes were seen within the stable conditions of closed systems without taking into account when the relationship interacts with external contingent factors. The majority of previous studies on RQ including those of in the pharmaceutical context have been undertaken from a positivist philosophical approach using regression techniques. Many scholars (e.g. Smith, 1998a; Smith, 1998b; Wray et al., 1994) have argued that the analysis of potential confounding variables interaction and their threshold level to each other is not possible with the use of regression techniques. Therefore, there is not a single study in general that has considered RQ objective outcomes when the relationship interacts with external factors, or other contingent relationships, i.e. in the value chain (e.g. the impact of patients' economic conditions, particularly in a pharmaceutical setting) or is seen as taking place in an open system. This aspect requires immediate attention, as it has also been argued that along with the identification of the factors that contribute to RQ, there is also need to verify under what conditions RQ provides the expected positive outcomes (Palmatier et al., 2006). Similarly, Easton (2002) discusses that rather than focus upon performance of the phenomenon, the researcher should study the conditions or environment under which the phenomenon can occur (or not). Therefore, it requires a methodological approach that is capable of the evaluation of the contextual factors and other contingent relationships, e.g. in the value chain (please see chapter 3 on methodology for more details) such as patients in pharmaceutical selling structure.

Therefore, based on the literature review findings, the following conceptual framework is devised, as shown below in figure 2.6. The devised conceptual framework is consistent with the prior conceptualization of RQ in an interpersonal selling context; however, it advances an evaluation of RQ objective outcomes under contingent economic conditions of another relationship in the value chain (e.g. PSR-physician-patient in this case). In addition, it can evaluate the PSR-physician RQ objective outcomes through the effect of different mechanisms, i.e. actual prescription generation activity rather than positive behavioural loyalty intentions.

The PSR, the pharmaceutical product and the patients as the objects of this structure possess their causal forces or mechanisms, which may interplay in physicians' decision making process (mental processing). These causal forces can be considered as 'tendencies' (but not as regularities) and their activation depends upon the interaction of certain mechanisms (Danermark et al., 2002). These include cognitive, affective (PSR-physician's RQ related), patient's wellbeing, affordability, patient's need (patient's related), and physician self-interest in the case of physician's prescription decision making.



***Figure 2.6: The initial conceptual framework for the current research***

Even if they are not active, the different underlying mechanisms related to the objects of the pharmaceutical structure are always present at different levels of reality (i.e. real and actual). The manifestations of different mechanisms under a particular patient's economic and medical context becomes an observable phenomenon, i.e. physician decision making in the empirical domain (Danermark et al., 2002). Therefore, it can be suggested that PSR-physician's RQ outcome in terms of prescription decision making is contingent upon both a patient's economic conditions and the price of the product, as proposed above.

Thus, if RQ and its outcomes are dependent on wider contextual factors and there is a lack of contribution in RQ research from developing countries (Asnai et al., 2009), where the economic issues might also have different impact on the exchange relationships and on their outcomes, then investigations into these dependencies are required. Previous research into RQ has considered objective outcomes, which were seen within the stable conditions of closed systems without taking into account when the relationship interacts with external contingent economic factors.

## **3 METHODOLOGY AND METHODS**

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### **3.1 INTRODUCTION:**

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This chapter describes the research approach and process undertaken to achieve this research's aims and objectives, and explore the gaps in current knowledge of RQ identified in the literature review. A transparent explanation of the research design and procedure contributes to the rigour of research (Yin, 2003, 2012). Therefore, the first section provides a statement of the aim and objectives of this study, which were developed through the initial conceptual framework drawn from literature review. The next section then discusses the philosophical perspective of critical realism, which underlies the research process. Next, the reasons for choosing an embedded case study design and qualitative research approach are discussed. Details of participant selection and recruitment are followed by details of the methods of data generation, preparation and analysis. Finally, ethical considerations are addressed.

### **3.2 RESEARCH AIMS AND OBJECTIVES:**

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The overall purpose of this research is to critically explore the determinants and mechanisms that contribute to RQ. Furthermore, the aim is to investigate how far product price (and related mechanisms) have an impact on the "outcomes" of PSR-physician's RQ under specific patient economic situations - in the context of Pakistan. The following are the research objectives that this research has proposed:

- To identify the key determinants and their underlying mechanisms needed by PSRs to build RQ with physicians in the Pakistani pharmaceutical selling context.
- To explore how physician-medical representative dyadic RQ interacts with product pricing and related mechanisms under the influence of contingent patient economic conditions.
- To examine the interplay of the underlying mechanisms and the tendencies they exhibit in the physician's prescription decision making in terms of pharmaceutical brands.
- To explore the efficacy of physician-PSR RQ, i.e. under what conditions, or contexts, it is more effective in terms of its outcomes.

### **3.3 RESEARCH PHILOSOPHY**

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The consideration and acknowledgement of research philosophy is of prime importance for any research (Saunders et al., 2012). Essentially, all philosophies can be characterized on the basis of three questions related to their ontology, epistemology and methodology (Guba, 1990). Briefly, at the ontological level there is difference in beliefs: for example, that

there is a social realm waiting to be uncovered by social researchers, which exists externally to the actors involved (i.e. an objectivist view of reality). However, the proponents of the other domains believe that social reality and its meanings are continuously being created by the actors involved (i.e. subjectivist view of reality) (Blaikie, 1993; Bryman & Bell, 2007).

At the epistemological level there are differences in terms of an inclination towards naturalistic or scientific methods in understanding social phenomena. In scientific methods, knowledge comes in the form of general laws (e.g. in positivism), whereas advocates of other domains emphasize humans as engaged in constant interpretation of their environment, e.g. as in interpretivism (Kazi, 2003). However, there is an alternative view (i.e. realism) that stresses the unraveling of structures in order to know the influences they have on social relations and that affect the behaviour of actors involved (May, 2001). Last but not least, methodology is concerned with how to design the research process in order to attain the knowledge preferred by one's acknowledged research philosophy, which offers certain approaches, either quantitative or qualitative or both. Philosophical assumptions of one particular paradigm support certain methodological approaches over others; therefore, as described above, the main difference of opinion is on philosophical assumptions (i.e. ontological and epistemological) leading to certain methodological preferences (Bryman, 2008a).

The final part of the research strategy is linked with the methods, which entail decisions on sampling technique, data generation and analysis. Decisions on the different methods chosen are not only influenced by ontological, epistemological and methodological considerations, but also by the ethical and practical, for instance the availability of resources and time. Table 3.1, below summarizes different philosophical assumptions and methodological preferences offered by three competing research philosophies.

**Table 3.1. Three main competing research philosophies**

<b>Element</b>	<b>Positivism</b>	<b>Constructivism</b>	<b>Realism</b>
<b>Ontology</b>	"Reality is real and apprehensible"	"Multiple local and specific "constructed" realities"	"Reality is "real" but only imperfectly and probabilistically apprehensible, so triangulation from many sources is required to try to know it"
<b>Epistemology</b>	"Findings true-researcher is objective by viewing reality through a "one way mirror"	"Created findings-researcher is a "passionate participant" within the world being investigated"	"Findings probably true-researcher is a "value-aware" and needs to triangulate any perceptions he or she is collecting"
<b>Common Methodologies</b>	"Mostly concerns the testing of theory. Thus, mainly quantitative methods such as: surveys, experiments and verification of hypotheses"	"In-depth unstructured interviews, participant observations, action research and grounded theory research"	"Mainly qualitative methods such as case studies and convergent interviews"

*Source: Based on (Sobh & Perry, 2006, p. 1195)*

The subsequent sections examine these three competing research philosophies and by comparing them offer the account on why realism, and in particular critical realism, provides the appropriate philosophical foundations for this research.

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### **3.3.1 POSITIVISM:**

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Ontologically, positivists believe that reality is external; and epistemologically they believe in that reality should be measured by using objective methods or the application of the methods of natural sciences to attain knowledge of social reality (Bryman, 2008b; Easterby-Smith et al., 2002, p. 28). Therefore, quantitative methods such as surveys and experiments are commonly used for the verification of hypotheses developed using deductive logic (May, 2001; Sobh & Perry, 2006). In positivism, causation is established when effect 'Y' is proved to be the result of cause 'X' in some kind of sequence, such as constant conjunction of events to observe empirical regularities (Pawson & Tilley, 1997; Robson, 2011). The result of following positivism's philosophical principles in a social science research is to produce general precise causal laws of human behaviour as social entities (May, 2001).

Despite being the dominant research philosophy (particularly in marketing scholarship), positivism has been criticised due to its inadequate view of social reality in that it cannot take into account human intentionality and reflections (Blaikie, 1993; Easton, 2002). Furthermore, causality is seen as a constant conjunction between the variables in the stable environment of a closed system, which means it cannot take into account external contingent factors (Danermark et al., 2002). For example, if following positivism for this research, a researcher would focus on the factors, or determinants, that are required to develop RQ, which influence physician's prescription decision making as its objective outcome in the stable environment of a closed system.

However, physician's prescription decision making involves complex mental processing. This is because they not only interact with PSRs but also patients as a part of the pharmaceutical selling structure. Patients, PSRs and a pharmaceutical product as objects of this structure possess their own causal forces, which may, or usually, interplay in physicians' decision making process (mental processing). These causal forces are considered as tendencies (but not regularities), which are contingently linked to the complex situations and their activation depends upon the activation of certain mechanisms; and it is not always necessary that these mechanisms exhibit themselves through empirically observed data (Danermark et al., 2002). Maxwell (2012) discusses that process explanation is less achievable with the application of positivists' quantitative methods because it requires researchers to deal with specific events and the processes that connect them. Thus, application of positivist methods cannot take into account these complex relationships and causal forces that influence the physician's prescription decision making as RQ's objective outcomes.

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### 3.3.2 CONSTRUCTIVISM:

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Ontologically, constructivists believe that social reality is constituted by language or discourses, or that reality is socially created and it is in a continuous process of creation and recreation by actors involved (Reed, 2009). Constructivists do not consider structural constraints or enablement and maintain that social structures do not possess causal powers. Moreover, they believe rules and principles are socially manufactured and expressed through symbols, and that social actors are participants in the construction of their own environment (Peters et al., 2013). Mir and Watson (2000) discuss that constructivists are considered as actors rather than information processors or reactors in research processes; therefore, constructivist researchers are also fully involved as passionate participants in investigating social reality, which is influenced by the researcher's worldview, his or her position and experiences (e.g. Sobh & Perry, 2006).

The common methodologies used in constructionist approach include participant observations, grounded theory, action research, phenomenology and ethnography (Sobh & Perry, 2006). The general mode of inference for constructivists is induction, which requires a researcher to consider the context of a study and the process of qualitative data generation and analysis in order to develop an understanding of the meanings that humans ascribe to events (Saunders et al., 2012).

If following constructivism when conducting this research, the researcher should then start interviewing the actors involved (e.g. physicians and sales managers or salespeople) without already going into available theories of RQ and rules that are practiced. The inductive strategy therefore believes in the generation of qualitative data and emphasizes more in the theories generated from data, grounded in the research context. However, this can create challenges for novice researchers, since it requires time, resources, and expertise from researchers (Miles & Huberman, 1994).

In addition to this, a constructivist researcher will not be interested in examining the external factors, such as economic conditions, and other relations in a value chain; instead the researcher looks into the actors experiences about social situations and what are the meanings that people place upon their experiences of social reality (Easterby-Smith et al., 2008). Therefore, the task of the researcher is systematic re-description and reinterpretation of socially created reality through detailed and careful reconstruction and deconstruction of the views of actors involved in a situation (Reed, 2009). However, criticism here often rests on how a researcher can come to a conclusion after the collection of different views of actors involved in one particular situation, i.e. which view is more legitimated, as constructivists believe in several subjectively constructed realities (Sobh & Perry, 2006). Furthermore, it is quite possible that the actors are not fully aware of the influences of structures and conditions within which they operate. This thus will not provide a real understanding of the efficacy of RQ phenomenon in terms of achieving its objective outcomes as physician's prescription decision making. This is because the forces or mechanisms determining the prescription decision making of physicians are complex

and numerous (Hellerstein, 1998), which constructivism's philosophical principles cannot take into account. Thus, application of constructivists guiding principles cannot provide knowledge about the forces that influence the physician's prescription decision making as RQ's objective outcomes.

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### **3.3.3 CRITICAL REALISM:**

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The latest development in the realist tradition, resulting mainly from the work of Roy Bhaskar (1979), has formed another version of realism, i.e. critical realism (Ackroyd & Fleetwood, 2000; Carter & New, 2004). The gulf between the competing paradigms on the issue of objectivism in positivism and subjectivism in interpretivism is somehow managed by the introduction of critical realism (Easton, 2010). Hence, it shares some of its features with both schools of thought (Sayer, 1992). Critical realism shares with positivism the aim of the explanation of social phenomena (May, 2001) and commitment to the view that there is an external reality that is separate from our description of it (Bryman & Bell, 2007). It shares partly with interpretivism the involvement of social actors in that it reflects the conditions in which they are living. The distinction here is, the acknowledgement by the researcher to focus on the environment (structures or conditions) rather than only the meanings that people give to their environment (May, 2001).

#### **3.3.3.1 CRITICAL REALISM'S ONTOLOGICAL ASSUMPTIONS:**

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Ontologically, critical realism believes in an external reality and emphasizes ontology more than epistemology, and within ontology it shifts focus from events to mechanisms by means of what produces the events, not just the event itself (Danermark et al., 2002). In other words, critical realism is committed to an extended or anti-reductionist social ontology comprising of distinct and stratified domains (i.e. layers or strata) of reality that encompass their own features or properties and which cannot be reduced into each other (Reed, 2009). Bhaskar (1979) named these three domains (or stratum) of reality as real, actual and empirical. The domain of the real comprises the realm of objects (with their mechanisms and causal powers). When these causal powers (at the real level) are activated, they give rise to patterns of events in the domain of actual. The empirical is the domain of sense-experiences and perceptions, either with the real or the actual (Tsoukas, 2000). Critical realism stresses that social science should not be based only on empirical facts (Danermark et al., 2002). This is because reality is not simply comprised of experiences and actual events, but also relatively it is comprised of structures, powers, mechanisms and tendencies that fortify, produce or facilitate the actual events that may (or may not) be experienced (Kazi, 2003).

These distinct domains move from the real domain to the actual and then the empirical domain in a contingent way (Tsoukas, 2000). As discussed, each domain contains its own specific objects and mechanisms holding their own powers and tendencies that come into a highly complex interaction with each other to generate certain outcomes (Reed, 2009). This complex interaction gives rise to the emergence of new entities or powers with their

capacity of irreducibility to their basic constituents, which is the core ontological belief of critical realism. Therefore, the new entities are the product of the combination and more than the sum of their constituents entities (Carter & New, 2004).

In this respect critical realism is committed to an 'open system' social inquiry, where different uncontrolled mechanisms operate simultaneously at different stratified domains of reality. And their effect or outcome is dependent on the activities of these different mechanisms (Reed, 2009). Therefore, the events (or outcomes) we observe are a complex combination of mechanism activities, where different mechanisms interact or interplay with and are influenced by each other. Some of these mechanisms are reinforcing, while others counteract each other's manifestation in the observed events or outcomes (Ackroyd & Fleetwood, 2000; Lawson, 1997; Reed, 2009). Therefore, critical realists believe in that it is not possible to study human societies in the way natural science is carried out in closed systems such as positivism, where the objects of study are kept in isolation, and studied without the interference of uncontrolled mechanisms (Carter & New, 2004; Danermark et al., 2002).

### **3.3.3.2 CRITICAL REALISM'S EPISTEMOLOGICAL ASSUMPTIONS:**

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Critical realism offers a number of epistemological implications. One of them is critical realists' emphasis on the anteriority of structures (Carter & New, 2004). Structures are collections of interrelated objects (Sobh & Perry, 2006) and could serve as "a portmanteau", a term used by Fleetwood (2005, p. 201), which refers to "configurations of causal mechanisms, rules, resources, relations, powers, positions and practices" related to different objects. For critical realists, objects or entities in a specific structure may be anything that possesses causal powers, or has an ability to change human behaviour; or makes a difference in a particular situation (Fleetwood, 2005). Objects are also liable in the sense that they are vulnerable to coming under the influence of other objects. Therefore, the understanding and explanation of relationships among objects is of vital importance for critical realists, i.e. the necessary or internal, and contingent or external relations (Easton, 2002). This is because structural analysis not only helps research in the identification of objects, but also the mechanisms associated with them.

Mechanisms are "nothing other than the ways of acting of things" (Bhaskar, 1978, p. 14). They consists of structures, powers and tendencies that "makes things happens in the world" (Danermark et al., 2002, p. 206) and lie under the surface level of experienced events and form their occurrences (Ackroyd & Fleetwood, 2000). Critical realists believe that we can observe directly that both nature and human society is generated by hidden mechanisms, but we cannot observe those hidden mechanisms directly (Lawson et al., 1998).

However, we can infer them by using the most important tool of abstraction, i.e. the abstraction of structures and mechanisms from theories and empirical observations. In this respect, Sayer (1992) suggests that a researcher should start by abstract theory analysis of objects with respect to their overriding structures, as part of wider structures

and in terms of the causal powers they possess. Therefore, a researcher can use conceptual abstraction that provides a way in which he or she can isolate certain aspects of social reality by using thought-abstraction, rather than isolating them by manipulating events (Danermark et al., 2002). Hence, abstraction is a useful tool that involves isolating or analysing social structures at any level, e.g. the social structure of dyad or triad (Danermark et al., 2002, p. 47), to identify their associated mechanisms through the help of theories related to these objects. This aspect of identification of mechanisms has already been examined in chapter 2 (literature review) through discussion of theories on RQ and physician's prescription decision making by means of structural analysis of PSR-physician-patient triadic relationship and pharmaceutical product as objects for the current research (please see figure 2.6).

However, Sayer (1992) also suggests that concrete research should explain mechanisms (i.e. identified from structural analysis as well as theories) and their interaction, which causes certain outcomes in different contexts. Thereby, context is simply the relevant circumstances, i.e. relationship between different objects and the relevant environment in which these relationships exist (Carter & New, 2004; Pawson & Tilley, 1997). Unlike positivism, outcomes or consequences can be seen as tendencies but not as regularities, since reality is constituted by strata of different mechanisms that interact to produce particular outcomes in a particular context (Pawson & Tilley, 1997). Therefore, central to critical realism is the related issues of causality and the explanation of mechanisms (Carter & New, 2004; Kazi, 2003; Reed, 2009; Sayer, 1992). These antireductionist ontological assumptions allow the critical realist to develop a model of causality where the social phenomenon can be explained with the logical identification and mapping of mechanisms consisting of structures and objects (Reed, 2009). The important point here is, the investigated structures and mechanisms are only real in their effects, they are not constant and contingent, or dependent on their environment or context. Consequently, the context of the social phenomena under observation is vital for research endeavours that follow critical realism (Sobh & Perry, 2006).

Causation is of a distinctive nature in critical realism as compared to a positivist approach, which is explained by Pawson et al. (2005) more appropriately. In positivism, causation is established when the cause 'X' is switched on and effect 'Y' follows. Many scholars explain this sort of causation by using the example of a match, which when lit and applied directly causes gunpowder to explode (e.g. Sayer, 1992; Sobh & Perry, 2006). However, in the case of a critical realist approach causation is established quite differently. That is, "to infer a causal outcome "O" between two events "X" and "Y", the researcher needs to understand the underlying mechanism "M" which connects them; and context "C" in which this relationship occurs" (Pawson et al., 2005, p. 2). There might be many mechanisms operating in an open system with respect to the particular context. However, which mechanisms under study are more important can only be decided with respect to the objects under study in a particular case through empirical evidence and in relation to the problem a researcher is addressing (Danermark et al., 2002).

The preceding pages provide the philosophical assumptions of critical realism; the following section explains the methodological implications of these philosophical assumptions, i.e. what tools it offers that can be used in addressing the objectives of this research.

### **3.3.3.3 METHODOLOGICAL IMPLICATIONS OF CRITICAL REALISM**

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As discussed above, in critical realism, "ontology precedes the epistemology that helps researcher, where to look and what to look" (Reed, 2009, p. 438). Thus, the aim of a critical realist researcher is to explain what mechanisms are involved behind the processes and events observed. This explanation involves the researcher firstly, in the identification of mechanisms that requires an intensive and careful analysis of pre-existing contexts, structural, relational conditions and interpretive schemes; and secondly, in the description of outcomes or events, when they interact, in a particular context (Sayer, 1992).

Therefore, retroduction is a methodological approach favoured by critical realists, which is capable for providing an in-depth understanding of underlying mechanisms and their explanation (Ackroyd, 2009; Carter & New, 2004; Danermark et al., 2002; Lawson, 1998). Retroduction is a mode of inference that has an intellectual ability that helps researcher to abstract, complex causal mechanisms contingently linked to the researcher's beliefs, perspectives and experiences based on empirical evidence (Lawson, 1998; Sobh & Perry, 2006). Retroduction is not a formalized mode of inference as compared to deduction, induction and abduction, which are used in different traditions. However, it resembles them insofar as "it is a thought operation that helps a researcher to move from acquiring knowledge of one thing to arrive at knowledge of something else" (Danermark et al., 2002, p. 96). That is to say, it enables the conceptualization from "knowledge of some phenomenon existing at any one level of reality to knowledge of mechanisms at deeper level or stratum of reality that contribute to the generation of the phenomenon concerned" (Lawson, 1997, p. 26).

Abduction is also favoured by a few critical realists to use in combination with retroduction, insofar as abduction can help a researcher to re-describe or re-contextualize the different aspects of the objects under study from available theories and hypothetical conceptual frameworks (Ackroyd, 2009; Danermark et al., 2002). However, abduction, and other alternative modes of inference, such as deduction and induction used in different paradigms, do not have such an ability to identify and explain underlying mechanisms (Danermark et al., 2002; Fleetwood, 2005; Kazi, 2003; Pawson et al., 2005; Reed, 2009; Sobh & Perry, 2006). Nevertheless, in addition to retroduction, deduction and induction can also be used in a research endeavour followed the guiding principles of critical realism (Danermark et al., 2002; Easton, 2010).

More simply, with a retroductive strategy a researcher could start research by acquiring knowledge from available literature about the phenomenon under investigation (Sobh & Perry, 2006). Alongside literature, a researcher may also acquire knowledge by interacting with people having experience of phenomena, prior to data generation (Miles &

Huberman, 1994). However, it is the only first step for critical realist research analysis, the logic here is concerned with what is known about an area of investigation by invoking abstract theory analysis and/or by asking people or using ethnographic methods. This therefore helps the researcher to build propositions on how the mechanisms are introduced by different available cases and outcomes they produce in certain contexts. Furthermore, it involves the researcher in the construction and application of theoretical models or conceptual frameworks (Reed, 2009), in which the researcher not only evaluates the potential causal mechanisms but also the prospective counteractive causal mechanisms of his/her context, which when they interact, certain predicted outcomes will, or will not, be obtained (Kazi, 2003). This exercise leads to further rounds of improved conceptual framework building, where the researcher applies disciplined imagination and analyses of empirical investigation from previous rounds and incorporates the understanding into the next round of theoretical abstraction and elaboration (Pawson & Tilley, 1997; Reed, 2009; Sobh & Perry, 2006). In this connection, retroduction emphasizes gradual theory development, which is subjected to conformity in the next step. Moreover, the knowledge produced within the retroductive strategy will always be context specific (Reed, 2009). Having established a conceptual framework or theoretical model, the next step is then the choice of methods for data generation (Kazi, 2003).

#### **3.3.3.4 CRITICISM OF CRITICAL REALISM**

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Apart from the above discussion on how critical realism influences this research, it comes under critique from the proponents of other philosophical approaches. One of the major criticisms from its opponents is that the theory of critical realism has evolved from the natural to the social sciences (Pawson & Tilley, 1997); therefore, they question how far it can be applied to the activities of researchers studying social phenomena (Mingers, 2004). They argue that the effects of deep structures and mechanisms are unquestionable in the natural world; for instance, gravitational force and magnetic fields cannot be seen but can be inferred through their effects; such systems of the natural world therefore can exist independently of our knowledge (Porter & Ryan, 1996). However, they confront critical realism's similar ontological position of social structures' causal efficacy in terms of mechanisms that make an observable change to human action. For them, social structures are associated with agency and therefore they are embedded in human practices (Lewis, 2000).

Positivists argue that critical realism focuses on causal complexity (such as in open systems), however, it lacks in providing the procedures or methodological tools that can handle such causal complexity in a sophisticated manner (Kurki, 2007). This is because retroduction, which has been advocated by critical realists as an essential tool for identifying mechanisms, is fundamentally an intuitive and creative process rather than a logical mode of inference, such as deduction in positivism. Therefore, use of retroduction can lead to many possible unverified explanations of phenomena under study (Mingers, 2004). Moreover, positivists also criticise critical realism on the grounds that does not

provide empirical studies, and therefore its contribution to concrete research is insufficient (Kurki, 2007).

There is no doubt that critical realism's ontology is not straightforward to apply; however, it is capable of studying complex interrelationships (Ryan et al., 2012). Most of the methodological issues can be managed if diligently applied. For instance, the issue of many possible explanations of a particular mechanism can be resolved by further data generation for their verification (please see section 3.8.1). Furthermore, critical realism allows the use of other modes of inference, such as deduction, induction and abduction along with retroduction (Danermark et al., 2002; Easton, 2010), therefore it can provide a more in-depth examination of social phenomena.

### **3.3.3.5 UTILIZATION OF CRITICAL REALISM FOR THIS RESEARCH**

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There are some critical voices, nevertheless critical realism is most appropriate in addressing this study's research objectives, since social science should be studied in open systems, because humans have the power of reflection, intentionality, language and the ability to adopt change (Carter & New, 2004; Danermark et al., 2002). For example, we cannot study the current research by considering the dyadic relationships of physician and PSR as the only factor that contributes to physician prescription decision making in a closed system (i.e. the correlation between two variables, if 'x' increases, 'y' also increases, as in positivism). For real understanding of the efficacy of RQ phenomena and their contribution to prescription decision making, we also need to consider other operating mechanisms within the context (e.g. related to patients' economic condition, product prices etc.), which when combined, might allow some new tendencies or powers to emerge to shape a physician's course of action. Therefore, this will provide the study not only ways to understand and explain the phenomena going deeper into contextual and structural issues; but also its analysis goes further down to the underlying mechanisms and tendencies manifested.

In following this approach, the study can explore the reality of the interplay of PSR-physician's RQ and pricing mechanisms in physicians' prescription decision making, or choice of a product, in a context where patients' economic status might be important (in developing countries, e.g. in Pakistan). Therefore, having acquired structural knowledge of mechanisms, the driving forces behind physicians' actions can then be estimated. Therefore, this may help to evaluate the possibilities, deficiencies, and limitations (Danermark et al., 2002) of the existing relationship quality phenomenon in the Pakistani pharmaceutical context. In doing so, the task of this study is not to falsify or prove existing knowledge of phenomena (or RQ theories); but to produce a fresh insight or alternate RQ conceptual model in different conditions or contexts of Pakistan (Sobh & Perry, 2006; Yin, 1994).

It appears from the literature that RQ objective outcomes (i.e. sales increase) were seen within the stable conditions of closed systems without taking into account when the relationship interacted with external contingent factors. Many scholars have argued that

the analysis of potential confounding variables' interaction and their threshold level to each other is not possible with the use of positivism's quantitative regression techniques (e.g. Smith, 1998b; Wray et al., 1994). Furthermore, it has also been argued that along with the identification of the factors that contribute to RQ, there is also need to verify under what conditions RQ provides the expected positive outcomes (Palmatier et al., 2006). In addition, Easton (2002) discusses that rather than focusing upon the performance of a phenomenon, the researcher should study the conditions or environment under which the phenomenon can occur or not. The acknowledgement of the environment (structures or conditions) is not possible by following constructivism's guiding principles. As researchers following constructivist approach focus only the meanings that people give to their environment (May, 2001). Therefore, this research requires a methodological approach that is capable of the evaluation of contextual factors and other contingent relationships in the value chain, which critical realism can provide.

### **3.4 RESEARCH DESIGN AND STRATEGY:**

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Critical realism emphasises that a researcher should not only take into account the research aims and objectives but also maintain the ontological and methodological link in their choice of research design and methods (Danermark et al., 2002). Therefore, researcher's choice of methods depends upon how a particular method can express knowledge about mechanisms. For this reason, critical realism allows researchers to use an extensive range of research methods, either quantitative or qualitative (Kazi, 2003). Quantitative methods require "an extensive research design" and qualitative require "an intensive research design" (Kazi, 2003; Lawson et al., 1998; Sayer, 1992). Critical realism also favours the mixed method research design, where researchers can use both intensive and extensive research design in their research process.

The quantitative methods (e.g. large-scale surveys, surveys of small representative groups with questionnaire or standardized interviews and statistical analysis) are more appropriate for extensive research design (Ackroyd, 2009; Sayer, 1992). This allows the researcher to investigate the regularities and patterns produced by a particular (or known) mechanism or structure of mechanisms (Danermark et al., 2002). However, an extensive research design does not provide an in-depth explanation of causal mechanisms. Instead, it provides descriptive representative generalization (Sayer, 1992). For example by using questionnaires or standardized interviews in a survey, it is possible to infer certain context mechanisms and their impact on outcomes (i.e. impact of RQ on prescription decision). However, this does not help in examining how these mechanisms manifest themselves in different situations or contexts (e.g. physicians may or usually come across different situations). Motives for actions or causal mechanisms are regarded as tendencies, which are contingently linked to complex situations; and it is not always necessary that these mechanisms exhibit themselves in empirically observed data. Maxwell (2012) discusses that the process explanation is less achievable with quantitative methods because it requires researchers to deal with specific events and the processes

that connect them. Therefore, the quantitative methods of data generation in extensive research design in relation to my research questions would have been unable to provide the thick description of the prescription decision making and the processes involved.

Qualitative methods of data generation (e.g. interactive interviews, observations etc.) in an intensive research attempt to answer questions like why a certain change, rather than any other, is produced in a particular situation. This makes it more significant in investigations of how mechanisms exhibit themselves in different contexts and requires a combination of textual, historical and structural data, which make it possible to recognize the patterns, relations and underlying mechanisms that produced them (Reed, 2009). That is, to identify how mechanisms work in a concrete situation requires a researcher to map out the causal powers research objects possess and how they interact to produce a social phenomenon. This requires intensive research design and qualitative methods of data generation. Therefore, critical realists reject positivists' concept of instrument formation and causation, where causation is seen as a constant relationship between two variables and can be discovered using quantitative methods. Instead, critical realists see theoretical concepts as properties and features of the real world. They also believe that mental states and processes are also part the real world and cannot be explained by quantitative methods (Maxwell, 2012). Therefore, critical realists propose that objects and social relations possess causal powers, which may or may not produce regularities and can be explained better through intensive research (Sayer, 1992).

It has already been discussed that to know the impact of PSR's RQ on physician's prescription decision making is not possible using quantitative methods, as it involves the complex mental processing of the physicians. They not only interact with the PSRs but also with patients as a part of pharmaceutical selling structure. The patients, medical representatives and products as objects of this structure possess their causal forces, which may or usually interplay in physicians' decision making process (mental processing). This interplay requires an intensive research design, such as in-depth interviews with a few or a small sample of physicians and qualitative textual data generation through interviews that will retain the chronological and contextual connections between the events (Maxwell, 2012). Thus, taking into account all these considerations, an intensive research design was considered to be most appropriate for this research.

The most common intensive approaches are ethnography and case study; however, the choice of a particular approach depends on the research aim and researcher's position (e.g. Ackroyd, 2009; Porter, 1993; Reed, 2009). An ethnographic approach seeks to describe and explain the culture of a group (Porter, 1993), whereas a case study approach enables a researcher to analyse the objects under study, the relationships between them and the causal powers they hold in a particular context (e.g. Easton, 2010). The purpose of this research was to critically evaluate RQ between PSR and physician and its impact on the physician's prescription decision making under contingent patient economic conditions in relation to the product's price. Therefore, case study research was chosen, since it provides the means to investigate a particular complex social phenomenon, while considering the

important circumstances in which it exists (Baxter & Jack, 2008; Stake, 1995; Yin, 2012). The following section further explains why case study approach is appropriate for the purposes of this research.

### **3.5 CASE STUDY RESEARCH:**

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Case study research has become a widely accepted research method among researchers in social science (Creswell, 2007; Easton, 2010; Easton & Harrison, 2004). There are many definitions of case study research and these definitions came from the different perspectives of its proponents. Therefore, there is still a lack of a definitive definition (Appleton, 2002). For example Yin (2003, 2012) views case study research as an inquiry or a method; however, Stake (1995) describes it not as a methodology but a choice of studying a phenomenon of interest as a case within its bounded system i.e. bounded by time and place (Creswell, 2007). Nevertheless, there is a consensus that the case study provides a form of intensive analysis of the phenomenon of interest, by considering and examining the key variables important to understand the dynamics of a situation, to provide a detailed account of the phenomenon (Appleton, 2002). Based on the perspectives discussed this research considered case study as a form of research strategy or "a research method that involves investigating one or small number of social entities or situations about which the data are collected using multiple sources of data and developing a holistic description through an iterative research process" (Easton, 2010, p. 119). Therefore, the participants of this research are seen as multiple sources of data, rather than the application of various methods (i.e. both qualitative and quantitative) in order to generate different types of data (Sobh & Perry, 2006).

The case study methodology offers a flexibility to take into account and unravel complex factors related to the phenomenon under investigation and relationships involved through one or a small number of cases (Easton, 2010). Therefore, it enables this research to analyse the objects under study (i.e. PSR, physician, patient and product) their relationships and the causal powers they hold, which can affect the physician's prescription decision making. In addition, it not only helps to acquire multiple viewpoints of participants on a single reality of factors required to develop PSR-physician RQ but also its effects on physicians' prescription decision making under contingent patient economic conditions in the bounded context of Pakistan. Thus, case study research helps in meeting the aims and objectives of this research by following the philosophical commitments of critical realism.

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#### **3.5.1 CASE STUDY APPROACHES:**

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The literature offers different approaches to conducting case study research, advocated by its two main authors (Stake, 1995; Yin, 2003, 2012), which reflect their philosophical commitments. For example, Yin (2003) offers a more positivist standpoint, and espouses the use of theoretical prepositions to guide the research through analytic generalization

and then to relate the findings of the case with theory to offer generalizations (Appleton, 2002). However, he advocates the use of both quantitative and qualitative approaches to case study (Creswell, 2007). Conversely, Stake (1995) shows his commitment to interpretivism and promotes theory development in case study through the use of qualitative methods (Baxter & Jack, 2008).

Both of these approaches have their advantages and disadvantages with respect to addressing the aims of this current research and following the guiding principles of critical realism. Critical realism suggests that our concepts are theory-laden (Sayer, 1992) and considers prior theoretical concepts as real features of the world (Maxwell, 2012). Therefore, prior theories on RQ phenomenon can be used to identify the inter-relationship between different variables (i.e. RQ determinants) introduced by these theories to infer their related mechanisms. Moreover, theories on pharmaceutical marketing and physicians' prescription decision making can also be used to discover the important variables related to the research questions. These theories from different scholarships can be used to form the preliminary conceptual framework, before entering the field for data generation (Sobh & Perry, 2006). Therefore, the current research is informed by the initial conceptual framework drawn from the literature review and follows Yin (1994, 2003, 2012) prepositions on use of theories. However, to infer the underlying mechanisms, retrodution will be used, which is more compatible with the methods of qualitative data generation and analysis (e.g. Easton, 2010; Reed, 2009; Sayer, 1992). Therefore, the current research follows Stake (1995) suggestion to use a qualitative approach for case study. Critical realism offers a flexibility of "critical methodological pluralism", where a researcher can adopt any method, on the basis of what is appropriate, to establish the relationship between meta-theory and methods (Danermark et al., 2002, p. 152). Therefore, this research adopts a hybrid approach to case study drawn from the perspectives of both Stake (1995) and Yin (1994, 2003, 2012), i.e. a choice of elements from each approach thought to be more relevant with respect to critical realism's standpoints.

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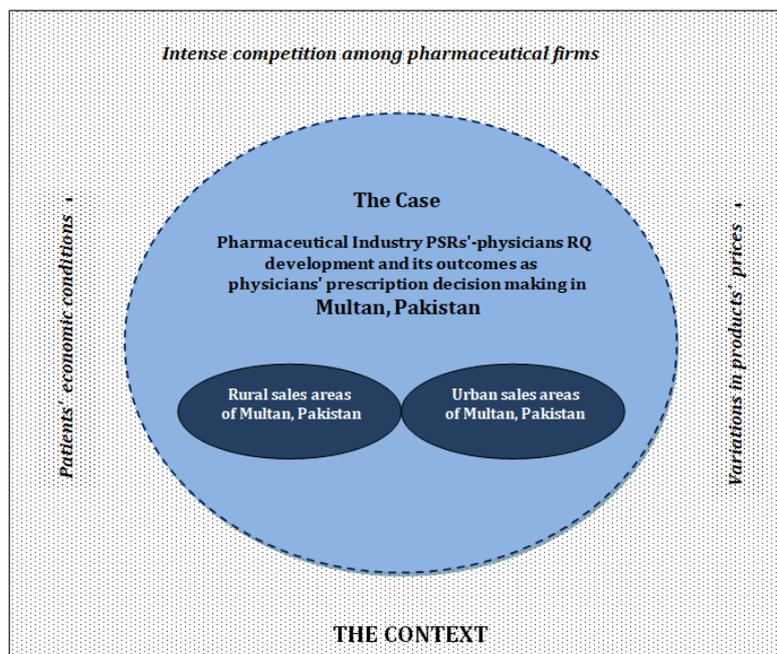
### **3.5.2 DEFINITION OF A CASE:**

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One of the vital aspects of case study research is the identification of a particular case bounded within certain parameters, such as a particular place and time (Creswell, 2007). This could be a concrete entity, for example an individual, organization or a group of organizations, a group of individuals, an industry, a programme, a relationship, an activity, a decision process or an event (Appleton, 2002; Baxter & Jack, 2008; Creswell, 2007; Yin, 2012). Moreover, Miles and Huberman (1994, p. 25) define a case as "a phenomenon of some sort occurring in a bounded context. The case is in effect your unit of analysis". Likewise Appleton (2002, p. 86) discusses "it is the phenomenon of interest and context that constitutes the case". He further states that the important aspect in defining a case should be how the particular case will aid the data generation and improve knowledge about the phenomenon of interest. Therefore, in the conduct of this research, a case is

construed on a geographic/industrial basis and defined as the pharmaceutical industry's PSR-physician RQ development process and its outcomes, on the basis of physicians' prescription decision making in the bounded context of Multan, Pakistan, as illustrated below in figure 3.1.

In Pakistan, due to intense competition, the pharmaceutical industry relies on the frequent interaction of PSRs with physicians to develop RQ and as a result to achieve prescriptions from physicians. All this development of the PSR-physician RQ and its outcomes in the form of physicians' prescription decision making occur in the bounded context of Multan in Pakistan. However, the pharmaceutical context is further particular in a sense that there is also a necessary relationship between patients and physicians. This relationship cannot affect PSRs-physicians RQ; however, patients' particular economic conditions can influence RQ's objective outcomes in terms of physicians' prescription decision making. Therefore, the context includes the overall economic conditions of patients of Multan, in Pakistan; and the variations in price of products that the PSRs represent, promote and seek prescriptions on the basis of their RQ with physicians.



*Figure 3.1 Case definition, design and selection for current research*

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### 3.5.3 RATIONALE OF CASE DESIGN, AND CASE SELECTION:

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Another task for a researcher who conducts a case study research is to decide on its design or type, which depends on the overall purpose of research (Baxter & Jack, 2008). According to Stake (1995), a case study should be either intrinsic or instrumental. He discusses that intrinsic cases facilitate researchers to investigate a particular case in order to develop in-depth understanding because the case is of unusual interest, e.g. the Pakistani pharmaceutical industry. Instrumental cases on the other hand assist researchers when the intent of a research is to gain an understanding of a phenomenon of

interest such as PSR-physician RQ development and its outcomes in terms of physician's prescription decision making. The intent of this research was to conduct a case study to gain an in-depth understanding of PSRs-physicians RQ development and its outcomes, in terms of physicians' prescription decision making, in the context of Pakistan rather than Pakistan as a case itself. Therefore, the case study was treated in this research as an instrumental rather than an intrinsic case study. Furthermore, for a researcher there is also a choice to conduct a single (or holistic) and collective (or multiple) case study (Stake, 1995; Yin, 2003). The conditions in Pakistan facilitate an understanding of the phenomenon under investigation in a context different to usual research endeavours undertaken in western developed countries. Collective or multiple case studies offers a researcher a way to investigate a phenomenon; therefore, a researcher selects many case studies rather than a single case to illuminate that particular phenomenon (Creswell, 2007).

Nevertheless, there is a common critique that case study research lacks in generalizability and in this regard, particularly a single case offers less generalizability than multiple cases (Yin, 2003). Therefore, an increased number of cases can overcome this common critique (Yin, 2003). Notwithstanding this, Creswell (2007) argues that for a majority of qualitative researchers, the term generalizability holds little meaning. He further argues that the investigation of more than one cases offers less depth, and hence weakens the overall analysis, and there is also no absolute answer on how many cases should be enough for generalizability (Creswell, 2007). Likewise Easton and Harrison (2004, p. 196) argue that "the use of the multiple cases more often results from the nervousness of the researcher than from any profound concerns about epistemology or methodology. The decision to use multiple cases should not be taken lightly, since how many and which cases are to be investigated will fundamentally affect the outcome of the research."

The case studies based on the guiding principles of critical realism investigate how and why particular complex events occur in a specific context (Wynn Jr & Williams, 2012). Thus, for a critical realist generalizability is not the outcome of statistical inference from a particular sample to a wider population; instead, it is achieved through the identification of the deep processes at work under contingent conditions via particular mechanisms, which requires intensive investigation (Easton, 2010). Therefore the dominant approach in the critical realism tradition is to study a single case, as it helps a researcher to develop rich, context specific causal explanations of phenomenon under investigation (Wynn Jr & Williams, 2012). Therefore, generalization within a critical realism based case study can achieve theoretical generalizability (Wynn Jr & Williams, 2012; Yin, 2003). Consequently, Easton and Harrison (2004) propose that the choice of conducting single or multiple cases depends on the nature of contingencies and the deep processes involved in different situations.

The purpose of this research was to identify the factors or determinants, and their underlying mechanisms that help PSRs to develop RQ with physicians. Further aim was to

investigate how this influences physician's prescription decision making as an outcome in an open system. The commitment to an open system based inquiry requires a researcher to identify the mechanisms posed by the different contingencies of pharmaceutical selling structure, such as: patient-physician relationship, patients' economic conditions and product price. The inclusion of many cases (such as other cities of Pakistan and similar countries such as Bangladesh and India) to this research would perhaps add further complexities but provided shallower rather than in-depth analysis, as well as understanding of RQ and its outcomes. Therefore, one case was thought to best serve the identification of mechanisms and their explanations for the purpose of the current research.

A researcher can choose a case study as a holistic case with an embedded design, when attention is also paid to subunits within a single or holistic case or multiple cases (Yin, 2003). This research used an embedded design, as it facilitates the conduct of research within different comparable contexts embedded in the same setting (Fitzgerald & Dopson, 2009). Critical realism suggests that the research design needs to be sensitive to the stratified nature of reality to be capable of identifying causal powers and their interaction(s) at different levels (Kessler & Bach, 2014). Therefore, embedded cases are situated at lower hierarchical levels within the overall case (Easton & Harrison, 2004) and hence provide the opportunity to extend the investigation of the central issue to a deeper level to understand the salient aspects of the case (Vincent & Wapshott, 2014). However, for analysis the whole case study will be considered as a single entity (Easton & Harrison, 2004). Figure 3.1 shown above that the case study here is construed on a geographic and industrial sector basis, i.e. the case is the processes required for Pakistani pharmaceutical industry PSRs to develop RQ with physicians. Its outcomes are therefore physicians' prescription decision making in Multan, with its urban and rural sales areas as embedded subunits. In this respect Multan as a pharmaceutical sales division was selected purposely for three reasons.

Firstly, Multan is one of largest divisions in Pakistan and it is also the capital city of Southern Punjab (a province in Pakistan) with a diversified population. That is to say, the population is divided into urban and rural areas. Patients' economic conditions often vary in these different geographic areas. Fones (2003) suggests rural areas are generally more deprived economically than urban areas, and that agriculture is still the main source of earnings, resulting in the lowest income per person in the Multan division. Families have more economically dependent members compared to those in of urban areas (Jones, 2003). The outcomes of the PSR-physician RQ will be investigated within these comparative embedded subunits. This will enable a focus on the impact of contingent patients' economic situation (based on their residence in either an urban and rural areas of Multan) in terms of physicians' prescription decision making.

Secondly, most patients approach Multan city (urban area) of Multan division from its rural peripheral areas (nearby small towns and villages) in seeking medical assistance due

to the availability of a major medical institution, named as "Nishter Medical Hospital", for secondary care treatment. This is the reason all the major national and multinational pharmaceutical organizations operate actively in sales promotions of their products. Therefore, physicians who are practicing and providing health care assistance in Multan are seen as more suitable for data generation in relation to addressing the research objectives. This is because they deal with patients from a range of different economic conditions and are also exposed to RQ development activities from PSRs of all the major pharmaceutical organizations.

Thirdly, the selection of case site is influenced by both what is ideal and also what is feasible in terms of access to its participants (Bryman, 2008b; Stake, 1995). Thus alongside other reasons discussed above, one of the reasons to select Multan division was its feasibility in terms of access to participants, which was secured through professional and personal networks.

### **3.6 PARTICIPANTS RECRUITMENT & SELECTION:**

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Along with the selection of the case(s) site, one of the important decisions that a researcher also has to make is the selection of the participants, and how many participants are sufficient. According to Flick et al. (2004), for effective selection in qualitative research, the researcher must be satisfied of two necessary conditions: first, a clear understanding of the case(s) under investigation and second, proper documentation of reasonable procedures or methods employed in selection of participants related to the case(s) under investigation. In this research the data were generated in two sequential phases (see below, section 3.7.2) therefore different participants were selected for both phase one and two of data generation.

The most common kind of the participant selection in qualitative research is purposive, where researcher decides upon the participants on the bases of the research questions (Bryman, 2008b). Furthermore, to ensure quality Creswell (2007, p. 127) suggests many other techniques (e.g. setting up some criterion or features) that can be used beside the purposive sampling strategy, which are designed to ensure the researcher recruits individuals with the surety that the participants' selection provides the best understanding of the central issue under investigation (Creswell, 2007; Silverman, 2010). Therefore, participants' selection for both phases was purposive along with a set criterion (please see below section 3.6.1 & 3.6.2).

Moreover, in a qualitative study the decision regarding how many individuals should be recruited is quite different from quantitative research, where the focus of the research is on statistical generalizations from a large sample size (Bryman, 2008b; Creswell, 2007; Flick et al., 2004; Maxwell, 2012). Instead the focus of qualitative research is to acquire an in-depth understanding of the processes and the local contextual influences involved in phenomena under study from a few selected individuals (Danermark et al., 2002; Maxwell, 2012). In this respect the most common strategy employed in qualitative study is

theoretical sampling. Bryman (2008b) discusses that the theoretical sampling strategy uses the criteria of sampling until theoretical (or thematic) saturation is reached. He further states that even if a researcher decides upon sample size on a theoretical basis, it is difficult to say after how many interviews theoretical saturation will be achieved (Bryman, 2008b). However, many qualitative researchers believe that saturation is achieved between 12-20 interviews (e.g. Baum, 2003; Guest et al., 2006; Warren, 2002). Furthermore, in deciding about the number of participants, researchers should also consider the practical aspects, e.g. the finite amount of time, access to respondents and logistical issues etc. (Miles & Huberman, 1994). Therefore, in this research the number of participants was determined mainly on the basis of thematic saturation while taking account of practical considerations. Thus, a total of 22 participants were recruited across both phases, i.e. 8 participants for phase one and 14 participants for phase two of data generation.

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### **3.6.1 PHASE ONE PARTICIPANTS:**

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For phase one data generation, participants from two different groups were recruited i.e. pharmaceutical salespeople and physicians. In this regard, there was a choice to select either PSRs or pharmaceutical sales managers (PSMs) to gather their views on RQ with physicians and on its outcomes. However PSMs were seen as more appropriate and chosen due to two main reasons. Firstly, they had worked as PSRs in their sales territories and therefore had many years of experience working as a PSR. Secondly as PSMs they have to work in different sales territories with different PSRs as their junior colleagues. Therefore, they not only had more exposure to dealing with physicians practicing in different locations with different needs, but were also in a better position to discuss what a PSR needs to do in order to build RQ and how far RQ influences physicians in their prescription decision making. Therefore, they were selected purposely and reminded that they should talk about their experience of being and working with PSRs rather than their roles as managers. Moreover, their selection was based on the criterion that they had at least more than ten years combined experience as both a PSR and PSM.

Based on the experience criterion discussed above, and using professional networks, nine PSMs from different national and multinational firms were initially contacted through a phone call in the month of March 2016. Finally, five PSMs agreed to participate in this case study research. They were all male because of the lack of availability of female PSMs in the Multan sales territory. This is possibly because women tend to be less interested in working as PSMs as it involves considerable travel, with overnight stays outside the home. Furthermore, culturally women in Pakistan, after their marriages, are expected to become more involved with their families' commitments, therefore they either opt to continue working as a PSR or leave the profession. Due to these issues, the selected male PSMs were then sent the interview consent form comprising of invitation and research related information via email (see appendix-1). They were requested to provide their details and send it back by replying to the email. A further appointment was then made with each PSM for data generation. The recruitment period lasted from March 2016 to April 2016 as all

the interviews were conducted within this time period due to the flexibility provide to PSMs by the interview mode (please see section 3.8.1). Each pharmaceutical sales manager was given a unique code, 'PSM' for simplicity, along with a number that shows the chronological order in which they were contacted, which is outlined below in table 3.2 along with their features.

***Table 3.2 pharmaceutical sales managers recruited from Multan city***

Interviewee Group & No.	Code	Gender	Organization Name	National/ MNC	Service Experience	Contacted Through
Pharmaceutical Sales Manager-1	PSM-1	Male	CCL	National	16 years	Professional Networks
Pharmaceutical Sales Manager-2	PSM-2	Male	Barrette Hodgson	National	18 years	
Pharmaceutical Sales Manager-3	PSM-3	Male	GSK	MNC	16 years	
Pharmaceutical Sales Manager-4	PSM-4	Male	OBS	MNC	16 years	
Pharmaceutical Sales Manager-5	PSM-5	Male	Sanofi-Aventis	MNC	20 years	

Similarly, there was also a choice to select among general physicians and specialist consultant physicians or surgeons, who deal with patients having particular advanced levels of disease. The general physicians (GPs) were thought to be more appropriate to investigate the influence of product price on RQ outcomes because when a patient approaches a specialist consultant physician with an advanced disease, the price of the product becomes secondary. Moreover, GPs represent one of the major contributors in terms of pharmaceutical prescription market share and therefore they usually are the primary target for almost all the pharmaceutical firms and their PSRs as potential customers. Furthermore, they practice in different locations, e.g. urban and rural areas, therefore they were in a better position to discuss how product price interacted with the RQ they had with PSRs during their prescription decision making under patients' contingent economic conditions.

Therefore, for phase one data generation three physicians were purposely selected based on the criterion of their practice size in Multan city. That is to say, a criterion was set that they should deal with at least a hundred patients per day in order to obtain sufficiently diversified views on RQ and its outcomes. The access to these physicians was secured through personal networks. They were already knew about the interview because I made these physicians' recruitment possible before my arrival in Multan through one of my family members who works as their colleague, he is a consultant pathologist in Multan. Upon my arrival at Multan, the physicians were first contacted through a phone call followed by personal visit upon their agreement to participate in this case study. They were provided with a similar interview consent form to that used for the PSMs, which they read, filled and returned on the same day (see appendix-1). A further appointment was then made with each physician for data generation. The recruitment period was June, 2016 and all the interviews were conducted within this time period. Similar to PSMs, each physician was given a unique code 'GP' for a simplicity along with a number that shows the

chronological order they were contacted, which is outlined below in table 3.3 along with their features.

***Table 3.3 physicians recruited from sales areas of Multan city***

Interviewee Group & No	Code	Gender	Number of Patients	Practice Location in Multan	Contacted Through
General Physician-1	GP-1	M	100 plus per day	Urban	Personal networks
General Physician-2	GP-2	M	150 plus per day	Urban and rural (Mixed)	
General Physician-3	GP-3	M	200 plus per day	Urban and rural (Mixed)	

All the physicians interviewed for both phase one and two were male. This is because male doctors predominantly work as general physicians in Pakistan, whereas female doctors mostly opt to work as gynaecologists or in other specialities. Therefore, despite strenuous efforts to recruit female doctors, it was not possible to persuade any to participate in the study.

### **3.6.2 PHASE TWO PARTICIPANTS (URBAN AND RURAL AREAS):**

The second phase was conducted in the two embedded subunits of the overall case, i.e. urban and rural sales areas of the Multan division. Altogether fourteen physicians were selected, seven physicians from each urban and rural sales area of Multan division; none of these physicians had participated in phase one of data generation. Similar to phase one, the physicians for the second phase were also selected on the basis of a set criterion of physicians' practice size, which was at least one hundred plus patients per day. The recruitment period lasted from June 2016 to July 2016 and all the interviews were conducted within this time period. The access to the second phase participants was secured by using both personal and professional networks as outlined in below table 3.4 and 3.5, along with participant features.

***Table 3.4 physicians recruited from urban sales areas of Multan division***

Interviewee Group & No	Code	Gender	Number of Patients	Practice Location	Contacted through
Urban General Physician-1	UGP-1	M	100 plus per day	Multan City	Personal Networks
Urban General Physician-2	UGP-2	M	100 plus per day		Personal Networks
Urban General Physician-3	UGP-3	M	150 plus per day		Personal Networks
Urban General Physician-4	UGP-4	M	100 plus per day		Personal Networks
Urban General Physician-5	UGP-5	M	100 plus per day		Personal Networks
Urban General Physician-6	UGP-6	M	200 plus per day		Professional Networks
Urban General Physician-7	UGP-7	M	150 plus per day		Personal Networks

***Table 3.5 physicians recruited from rural sales areas of Multan division***

Interviewee Group & No	Code	Gender	Number of Patients	Practice Location	Contacted Through
Rural General Physician-1	RGP-1	M	100 plus per day	Various Rural areas of Multan division	Personal Networks
Rural General Physician-2	RGP-2	M	100 plus per day		Personal Networks
Rural General Physician-3	RGP-3	M	150 plus per day		Personal Networks
Rural General Physician-4	RGP-4	M	100 plus per day		Professional Networks
Rural General Physician-5	RGP-5	M	100 plus per day		Personal Networks
Rural General Physician-6	RGP-6	M	200 plus per day		Personal Networks
Rural General Physician-7	RGP-7	M	150 plus per day		Professional Networks

### **3.7 METHOD OF DATA GENERATION:**

The case study approach facilitates an in-depth investigation of a phenomenon under study, therefore a researcher can use any method of data generation in order to capture the complexity of the situation in which the phenomenon exists (Easton, 2010; Johnston et al., 1999). However, critical realism proposes that the researcher's choice of methods depends upon how the use of the particular method can express knowledge about mechanisms (Danermark et al., 2002; Easton, 2010; Kazi, 2003; Sayer, 1992). It is already discussed in section 3.4 above that quantitative methods are more appropriate for extensive research design (Ackroyd, 2009; Sayer, 1992). Conversely, qualitative methods of data generation in an intensive research attempt to answer questions such as why a certain change occurs rather than any other, and why it is produced in a particular situation or case (Reed, 2009). That is, it is more significant in investigations of how mechanisms exhibit themselves in different contexts (please see section 3.4). The aim of this research was to identify the determinants and processes, i.e. the underlying mechanisms, needed to develop PSR-physician RQ and its objective outcomes in the form of physicians' prescription decision making within a bounded system, which is the socioeconomic context of Pakistan. Therefore, qualitative methods of data generation were identified as most appropriate.

There are a variety of different qualitative methods (such as interactive interviews and observation etc.) available; however, the interview method was thought to be more feasible and appropriate for the purpose of this research. This is because with the use of observations, it was not possible to identify the interviewees' mental processes and related psychological or emotional mechanisms, which may be involved in the development of RQ, as well as influencing outcomes in terms of physicians' prescription decision making. Moreover, an interview method can help to ask interviewees questions about the events and actions that took place in the past, which are not accessible through observational methods (Maxwell, 2012; Saunders et al., 2012).

### **3.8 INTERVIEWS:**

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There are many forms of interview design (e.g. structured, unstructured and semi-structured interviews) but the selection of which type depends upon the research purpose and strategy (Saunders et al., 2012). Structured interviews (also known as quantitative interview method) are more often used to obtain data subjected to quantitative analysis as a part of a survey strategy. An unstructured interview is an open ended interview where the researcher may have just a single question, to which the interviewees respond freely and researchers then build their research work on the responses of respondents (Bryman & Bell, 2007). Unstructured interviews are mostly used in an exploratory study as a part of grounded-theory and case studies strategies with an inductive approach (Saunders et al., 2012).

The semi-structured interview method is another form of qualitative interviews that facilitates data generation in which the researcher already holds a list of specific questions informed by the conceptual framework and/or research questions (Miles & Huberman, 1994). This helps a researcher to gather a manageable amount of data for later analysis (Bryman & Bell, 2007; Miles & Huberman, 1994). Moreover, semi-structured interviews provide a flexibility to researchers because they can be used for both exploratory and explanatory purposes (Easton, 2010; Saunders et al., 2012). This is because the researcher holds the list of questions that seek some explanations; however, the interviewees are able to respond to open-ended questions with full liberty. This may also provide an opportunity to consider some new dimensions or issues regarding the phenomenon under study.

Since this research was informed by the initial conceptual framework, which was drawn from literature review, a semi-structured interview method of data generation for both phase one and two was thought to be more suitable for the research purposes.

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#### **3.8.1 INTERVIEWS SEQUENCE, MODE AND SCHEDULE:**

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Maxwell (2012, p. 103) discusses that “the main implication of realism for qualitative data collection is that data are usefully seen, not simply as texts to be interpreted or the constructions of the participants (although they are this) but as **evidence** for real phenomena and processes (including the mental phenomenon and processes) that are not available for direct observations. These data are used to make inferences about this phenomenon which can then be tested against additional data”. Therefore, maintaining that critical realism emphasizes a stratified reality, the interviews were conducted in two sequential phases. The first phase was conducted in the city of Multan in Pakistan in order to validate the initial conceptual framework drawn from the literature review. The aim of this phase was to avoid the risk of personal biases and overlooking any local causal factor or mechanism, and to develop a more concrete (or revised and improved) conceptual framework (Miles & Huberman, 1994). The second phase was conducted in two embedded subunits of the overall case, i.e. urban and rural sales areas of Multan division. This phase was conducted to verify the *revised* conceptual framework, i.e. how the mechanisms

related to PSR-physician RQ identified in phase one interact with product price and the patient's economic conditions within these two different geographic areas.

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### **3.8.2 PHASE ONE INTERVIEWS**

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The first phase of one-to-one semi-structured interviews were conducted with five PSMs from Multan in Pakistan via the internet by using 'Skype'. Braun and Clarke (2013) discuss that telephone, emails and online interviews are not regarded as substitutes for face-to-face interviews. However, they are considered as an appropriate, different type of one-to-one interview method. Nevertheless, with the advancement of information and communication technology in past decades, software like Skype provides an alternative or supplemental choice to qualitative research for data generation (Janghorban et al., 2014). The use of Skype for interviews provides a synchronous or real time environment where a researcher and participant can interact simultaneously by choosing both audio and video calls in order to generate qualitative data (Janghorban et al., 2014). The further advantages of using Skype for interviews included the easy access to geographically dispersed participants, and the availability of a recording facility as one does in face-to-face interactions. Moreover, it helps a researcher to manage time and financial constraints during qualitative data generation (Sullivan, 2013).

Considering all these benefits, Skype was used as a viable option to conduct the first phase interviews with PSMs, along with taking into account several other practical reasons. Firstly, I was studying in the UK and as an international student there was a constraint that I could not spend more than three months outside the UK during my study period. Secondly, it was thought the Skype interviews could help me not only to refine first-phase interviews with physicians (which was done face-to-face) but also plan the second phase interview schedule in advance by the initial analysis of data generated from PSMs. Therefore, I discussed via phone call with all the five PSMs first whether they were able to use Skype for interview purpose. All the PSMs showed their willingness to conduct interviews through Skype as they were frequent users; and it was also convenient for them because they were able to participate in this case study after their working hours at their homes. The first interview was conducted at 2nd of April, 2016 and rest of interviews were also conducted within the same month, according to the appointment time and date set with each PSM. The average time for these interviews was approximately 99 minutes (please see appendix-4). These in-depth semi-structured interviews were recorded (with the consent of PSMs by using the software 'AMOLTO call recorder for Skype, version 3.0.6.0'), which was later used for transcription and analysis purposes.

Subsequently, as part of the first phase interviews, three physicians were interviewed face-to-face upon my arrival in June, 2016 at Multan, Pakistan. The decision to conduct the interviews with physicians face-to-face was partly based on their reluctance to interact through Skype. Due to their busy schedules they were less familiar with using Skype than PSMs, who used this technology to interact with their senior managers at head-offices away from Multan.

All the interviews for phase one were conducted in the Urdu language for better understanding of the questions asked. If the interviews had been conducted in English there would have been a risk that misunderstandings could occur, and that conceptual and emotional nuances of both expression and understanding could have been missed. These interview questions were first developed in English, then translated into Urdu. Interviews were held at physicians' clinics and the average length of these interviews was about 43 minutes (please see appendix-4). The interviews were recorded on two recording devices with the consent of physicians, which was later used for transcription and analysis purposes.

The interview schedule for both the PSMs and the physicians was the same and was developed by considering the research objectives (see section 3.2) and the initial conceptual framework drawn from literature review outlined above in figure 2.5 (Miles & Huberman, 1994). Moreover, the interview schedule was pre-tested by interviewing two former PSMs from Pakistan residing in the UK via telephone in order to make sure the questions were easily understood by the respondents; and their responses achieved the objectives of this research. After making slight language adjustments in line with respondents' queries and suggestions, the interview schedule for the PSMs was finalized. However, the questions used for physicians were slightly updated because of ongoing initial analysis of the first five interviews of PSMs.

The final schedule used in this research for each interview commenced with an introduction, explanation about the purpose of the interview and acquiring interviewees' consent for recording. This was followed up by the questions like 'How are you today' and 'Can you describe yourself a bit' in order to establish a rapport with interviewees (Braun & Clarke, 2013). The main body of interview questions was divided into three main parts (please see appendix-2 for schedule).

Firstly, to identify the RQ determinants, it was essential to know about the interviewees' perception about RQ (i.e. trust, satisfaction and commitment). Therefore, the focus in initial discussion was placed on what RQ meant to them through questions such as when they considered that there was a strong relationship between a PSR and physician. The main questions were also followed by some follow-up probes for further clarification. They associated RQ with either good or strong relationships; however, they described that good or strong relationships developed when all these three constructs, trust, satisfaction and commitment, were established.

After attaining their views on RQ, the focus of the discussion shifted to what determinants a PSR needed to develop RQ. During the interviews the interviewees were at full liberty to answer questions; however, in this phase some follow-up question were administered to explore the conceptual framework I had developed and also for clarity on the words or phrases interviewees' used. For example, one physician discussed the PSR's presentation as a RQ determinant, which can be perceived either as the PSR's overall appearance or communication. To make clearer such ambiguous phrases I asked a follow-up questions

like 'Can you please clarify a bit what do you mean by a PSR's presentation'. Furthermore, to identify the underlying mechanisms associated with each RQ determinant, interviewees were asked follow-up questions such as 'Why they think that a certain determinant leads to RQ?' By adopting the 'peeling-the-onion-layers' analogy during interviews, I was able to identify the mechanisms and establish the causal relationships between different constructs.

Having established the RQ determinants, the discussion then turned towards the topic of PSR-physicians' RQ outcomes. Firstly, how RQ helps a PSR to achieve its outcomes, and then how the product price a PSR promotes interacts in relation to patients' economic conditions; and what would be the outcomes of this interaction in terms of physician's prescription decision making. Again, to identify the underlying mechanisms that cause a change in physician prescription behaviour and consequently to RQ objective outcomes, follow-up questions were asked of interviewees. For example, 'Why do you think that a higher product price can cause a barrier for a PSR to achieve his RQ outcomes from a physician'? At the end of each interview the physicians were asked if they wanted to add anything to the discussion in order to avoid anything important being excluded.

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### **3.8.3 PHASE TWO INTERVIEWS:**

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To confirm the findings of phase one, the second phase of face-to-face semi-structured interviews was then conducted to generate data on how the mechanisms identified in phase one interact with product pricing and patient economic conditions within two different geographic areas [Multan city ('urban') and Multan division ('rural') sales territories] as embedded cases. These went similar to phase one interviews with physicians, except that a few interviews were held at physicians' clinics, and others were held at physicians' residences because some physicians were practicing in rural areas but living in Multan. All second phase interviews were also conducted in the 'Urdu' language. The average length of these interviews was about 33 minutes for urban and 54 minutes with rural sales area physicians (please see appendix-4). Similar to the phase one interviews with physicians, these interviews were recorded on two recording devices for safety, with the consent of physicians, and later used for transcription and analysis purposes.

The interview schedule for the second phase interviews was quite different from the first phase interviews (please see appendix-3), which was developed with the help of the revised conceptual framework outlined in the following chapter in figure 4.4 (please see page 137). Therefore, similar to the first phase the interview schedule for second phase was also initially pre-tested through interviewing one physician in Multan, the same interview schedule was used as no changes were seen as needed. The aim of these interviews was to investigate the interaction of mechanisms identified in phase one interviews in two different contexts for comparative analysis. However, there was a considerable overlap in questions. For example, the interview started with the same rapport-developing questions, as was done in phase one. Then, to create a context of

research, the physicians were very briefly asked about what they thought about RQ and what determinants are needed by a PSR to develop RQ with a physician, followed by some follow-up questions to identify and verify the mechanisms identified through phase one. This not only helped me to create a context of discussion and research topic for physicians, but also the data generated was used as evidence to verify the determinants and their associated mechanisms needed by a PSR to develop RQ and achieve its outcomes.

The discussion then shifted to the main topic of these interviews, i.e. how PSR-physician RQ interacts with the product price in relation to the economic conditions of patients living in both rural and urban areas of Multan division. Furthermore, how and why patients' economic conditions influence physicians' prescription decision making as an objective outcome of RQ. Therefore, the data generated helped me to identify the efficacy of RQ, i.e. for whom and under what conditions RQ works more effectively in achieving its objective outcomes. Similar to the phase one interviews, at the end of each interview the physicians were asked if they wanted to add anything to the discussion in order to avoid anything important being left out.

### **3.9 DATA ANALYSIS:**

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#### **3.9.1 DATA PREPARATION:**

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Data organization and preparation is one of the important aspects of qualitative research (Braun & Clarke, 2013). The data generated from PSMs was recorded on an AMOLTO call recorder for Skype and the interviews with physicians were recorded on an OLYMPUS DIGITAL VOICE RECORDER and IPHONE 6. These recordings were then transferred to a personal computer and used for the transcription process. Each interview was listened to and transcribed verbatim in Urdu language manually (on paper) by me. These hard copies of each transcript were then typed using Microsoft Word by downloading another software, 'Pak Urdu Installer', which has the inbuilt ability to synchronize with Microsoft Word, which enables a typist to type in the Urdu language. I then typed eight interviews and an expert Urdu typist in Pakistan typed 14 interviews. This effort to type up the interviews was because the intention was to use a computer assisted software program for convenient data analysis, which required importing a Microsoft Word document. After matching the hard copies of transcripts with the typed Microsoft Word documents and upon satisfaction that these typed documents had no inconsistencies, they were then imported to computer assisted qualitative data analysis software.

There are many types of computer assisted qualitative data analysis software available. Among these QSR NVIVO, and Atlas ti are predominant in the market. Both share almost the same features in terms of storing and managing data efficiently, labelling the data chunks with a code, searching the textual data chunks through code labels quickly, memoing and grouping similar codes into a one category or theme (Gibbs, 2007). However,

Atlas ti has the advantage that it can be used for text written in many languages, including Urdu; however, QSR NVIVO does not provide facility for the analysis of Urdu language text. In this research analysis of the interviews in its original language of Urdu was under taken to avoid losing the original meanings that could lead to misinterpretation of the text during the translation process.

However, Atlas ti offers its interface in English for coding, memoing and grouping similar codes into categories and themes (known as families and super-families in Atlas ti parlance). I used Atlas ti to store, manage, code, and group the similarities into categories or families. This helped me retrieve the data segments quickly, whenever I needed them for analysis, and display the quotes after translating them into English. It also offered the ability to view many hermeneutic project files at the same time, which made for convenient comparative analysis. However, I did not use it to draw networks or displays, I did this task manually as I found it little complex using Atlas ti.

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### **3.9.2 DATA ANALYSIS:**

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The qualitative data generated comprises a huge amount of textual material that cannot be analysed straightforwardly and requires a specific strategy, or strategies, for its analyses (Bryman, 2008b). Therefore, to analyse both the first and second phase interview data, a thematic analysis strategy was considered as it provides a convenient data analysis structure to novice qualitative researchers (Braun & Clarke, 2013). Furthermore, it is also appropriate for data analysis of research following critical realism's guiding principles, as it can produce explanation that looks beyond the surface level appearances to the underlying social processes or mechanisms (Braun & Clarke, 2006).

Thematic analysis is a form of recognizing, analyzing and reporting patterns or themes salient in the text at different levels (Attride-Stirling, 2001; Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006). In this respect Braun and Clarke (2006) discuss that themes (or patterns) can be identified and analyzed either by adopting an inductive or deductive (more theoretical) approach. In an inductive approach the themes are recognized from the data itself; however, they may represent only a small link between the questions asked of participants and the researcher's own theoretical interests. On the other hand, a deductive or theoretical thematic analysis approach facilitates a researcher to pursue his/her theoretical interests and focus can be placed on more detailed analysis of an area of interest (Braun & Clarke, 2006).

**Table 3.6 Initial data analysis framework of provisional themes, sub-themes, categories and sub-categories**

<b>Themes</b>	<b>Sub-themes</b>	<b>Categories</b>	<b>Sub-categories</b>
<b>RQ Determinants</b>	<b>Firm-related Determinants</b>	<b>Firm's Image</b>	
		<b>Product Quality</b>	
	<b>PSR's Related Determinants</b>	<b>PSR's Visit Frequency</b>	
		<b>Relationship Investments</b>	
		<b>Product Knowledge</b>	
	<b>Ethical Selling Behaviour</b>		
<b>RQ Dimensions</b>		<b>Trust</b>	<b>Cognitive Trust</b>
			<b>Affective Trust</b>
	<b>Satisfaction</b>		
	<b>Commitment</b>	<b>Calculative Commitment</b>	
			<b>Affective Commitment</b>
<b>RQ Outcomes</b>		<b>Physician's Prescription Decision Making</b>	

I endeavoured to follow critical realism's guiding principles by considering prior theoretical concepts as a real feature of the world (Maxwell, 2012). Therefore, for the phase one interviews the themes were created with a deductive approach, which was informed by the initial conceptual framework. Each theme was then further organized by creating a set of sub-themes, which were then allocated the relevant data categories and sub-categories prior to analysis. This provided a pre-existing coding framework, which facilitated organizing the data according to its relevance to a particular category or sub-category connected to a particular sub-theme and theme. The initial themes, sub-themes, categories and sub-categories developed for phase one interviews are outlined above table 3.6.

In the next step the transcripts were then read repeatedly for further data familiarization, which helped me make annotations on each transcript's hard copy and the creation of short summaries of transcripts. This exercise enabled not only the verification of the categories or sub-categories connected to particular themes and sub-themes outlined above in table 3.6, but also the recognition of new emergent categories and sub-categories from the data, which facilitated me in the coding process. The final themes, sub-themes, categories and sub-categories developed for phase one interviews are outlined below in table 3.7.

**Table 3.7 Final data analysis framework of themes, sub-themes, categories and sub-categories for phase one interviews**

<b>Themes</b>	<b>Sub-themes</b>	<b>Categories</b>	<b>Sub-categories</b>
<b>RQ Determinants</b>	<b>Firm-related Determinants</b>	Firm's Image	
		Product	Product quality Product Price*
	<b>PSR Related Determinants</b>	PSR's Visit Frequency	
		Appearance	
		PSR's Flexible Responses to Varied Situations	
		Communication	
		Product Knowledge	
		Ethical Selling Behaviour	
		Relationship Investments	Generalized Services Personalized Services
	<b>RQ Dimensions</b>		Trust
Satisfaction			
		Commitment	Calculative Commitment Affective Commitment
<b>RQ Outcomes</b>	<b>Subjective or Behavioural Outcomes</b>	Recognition	
		Time and Priority	
	<b>Objective or Actual Outcomes</b>	Expected increase in PSR's sales or Prescription share	
		Prescription for Alternative	
<b>Patient economic and medical conditions</b>		Patient-Physician Relationship, satisfaction and Practice viability	
<b>Product Price</b>		Exposure of alternative products and relationship with other PSR	
*Product price was not considered as an RQ determinant but a product's property that acts as a barrier and interacts with RQ's Objective outcomes under contingent patient economic conditions (see section below 4.5.1-2.2 on product price)			

As in other qualitative methods of analysis, coding is an essential part of the of thematic analysis strategy, whereby the data is broken down into separate units on the basis of similarity and given a label or a name (Braun & Clarke, 2013; Bryman, 2008b; Maxwell, 2012). For coding, all the Microsoft word documents (i.e. interview transcripts) were then imported to Atlas ti by creating a hermeneutic project file that was given the name 'QDA-786'. The codes were then generated by breaking up interviews into chunks of data, such as a sentence or entire paragraph, which were allocated labels or close code names in relation to their relevance with a particular data category or sub-category from the existing coding framework.

There are different methods of creating codes either by using an inductive or deductive method. In the inductive method the codes are generated during the data collection. Deductive coding can be done prior to data generation, informed by the researcher's conceptual framework, and research questions or objectives but with the risk of losing important grounded data (Miles & Huberman, 1994). In this research the coding of data

generated through phase one and phase two interviews was done during the data analysis rather than by using a coding list prior to data analysis. However, the coding was informed by the pre-existing framework of data categories or sub-categories connected to particular themes and sub-themes, as discussed above. Furthermore, there are many forms of coding such as open, axial and selective coding (Gibbs, 2007). In an open coding, coding is done on the basis of the data itself, without considering any prior theoretical concept, i.e. research that follows a grounded theory or constructionist approach. However, when following the critical realist approach, codes are usually generated by following the conceptual framework; therefore, axial codes are created, that is to say codes from the conceptual framework are assigned to a chunk of data (Sobh & Perry, 2006). As discussed above, in this research the coding was done through a coding framework, informed by the initial conceptual framework, therefore axial codes were generated first, which led to selective coding for comparisons and interpretations.

Gibbs (2007) discusses that axial codes can be generated for six different elements within the data. These are: causal conditions, phenomenon, strategies, context, intervening conditions, action/interaction and outcomes or consequences. He further exemplifies axial coding as "the causal conditions produce the phenomenon, which in turn causes the strategies in the context. These are mediated by intervening conditions and produce action and interactions that result in consequences" (Gibbs, 2007, p. 87). For the purpose of this research the codes were generated in similar fashion. However, to establish associations with a particular data category, each code label starts with the letters that represent its parent data category or super code. For instance, to label data chunks that identified product quality as important for physicians because it is required for patient welfare, the code 'FRD-PQ-patient welfare' was used. Similarly, data chunks in which the physician establishes his trust in PSR due to product quality were coded as 'Trust=FRD-PQ-Phys-trust-PSR-PQ' and the data chunks that represented the consequences of physician's trust as a component of RQ were coded as 'RQOO-Sales'.

After labelling and coding, all the similar individual codes were brought under one particular data category or sub-category by creating code families. Each category was then named or labelled by a super or selective code. Related data categories were brought under particular themes or sub-themes by creating super families in Atlas ti. This cyclic process of manual and computer assisted work helped me to gather all the similar data quotes (labelled with a particular code) related to each category (in connection to a particular theme) in one place, for further in-depth review and analysis. Table 3.8 outlines some of the themes, sub-themes, categories, sub-categories and codes or labels used as an example. Appendix 5 further provides a list of all codes that were created during first phase interview analysis and the coded screen print captured from Atlas ti respectively.

**Table 3.8 Final categories, sub-categories and example of some codes generated for phase one data analysis**

Theme	Sub-theme	Category	Sub-Category	Super-Code	Codes
RQ Determinants	PSR's related determinants	PSR's visit frequency		PSR-VF	PSR-VF-for reminder PSR-VF-physician felt obliged PSR-VF-for PSR's recognition
		PSR's ethical selling behaviour		PSR-ESB	PSR-ESB-Avoid False Claims PSR-ESB-inform side effects
		PSR's flexible responses to varied situations		PSR-ASB	PSR-ASB-Detailing PSR-ASB-VF and time PSR-ASB-Postman call
	Firm related Determinants	Product	Product Quality	FRD-PQ	FRD-PQ-compliance FRD-PQ-Patient Welfare FRD-PQ-Packaging
RQ Dimensions		Trust	Affective	Trust	Trust=Phy-A-trust-PSR-VF Trust=Phy-A-trust-PSR-ASB Trust=PSR's commitment fulfilment Trust= PSR's Sincerity
			Cognitive		Trust=FRD-FI-Phy-trust-PSR-FI Trust=FRD-PQ-Phy-trust-PSR-PQ Trust=Phy-trust-PSR-ASB
RQ Outcomes	Subjective Outcomes	Time and Priority		RQSO	RQSO-Priority over other PSRs RQSO-time
	Objective Outcomes	Expected increase in PSR's Prescriptions		RQOO	RQOO-RX-Frequency RQOO-Sales

Similar to the phase one interviews, coding for the sequential second phase interviews was also done by combining both deductive and inductive approaches. However, to organize the data all the sub-themes, categories and sub-categories were first created deductively, which was informed by revised conceptual framework developed through the analysis of first phase interviews. These categories and sub-categories connected to a particular sub-theme were then further verified by the ongoing data analysis during coding process with the help of Atlas ti. After labelling and coding, all the similar individual codes were brought under one particular data category or sub-category by creating code families. Table 3.9 outlined the sub-themes, categories, sub-categories and codes or labels used as an example. Appendix 6 further provides a list of all codes that were created during the second phase interview analysis and the coded screen print captured from Atlas ti respectively.

*Table 3.9 Final categories, sub-categories and example of some codes generated for phase two data analysis*

Theme	Sub-themes	Categories	Sub-Categories	Codes	
<b>RQ Objective Outcomes As Physicians' Prescription Decision Making</b>  <b>(Prescription for PSR's Product or Switch for Alternative)</b>	<b>PSR's-Physician RQ</b>			RQ developing determinants FI and PQ PSR's PQ PSR's VF PSR's RI PSR's P-services Phy-technical-need-fulfilment RQSO Product-Price Price and RQ interaction RQOO=Rx when price is competitive RQ+HPPR=No RX RQ+HPPR=RX for affording class RQ+HPPR=Switch	
	<b>Patients' Economic Conditions</b>			Patient's economic cond Phys sensitivity of P-Econd Pat-eco-benefit Mech-Affordability Mech-Patient's Affordability	
	<b>Patient-Physician Relationship</b>	Physicians' Professional Ethics			Phy-Prof-ethics RX-DM=Quality and Economy
		Physician's Humanity, empathy and sympathies			Phy-Humanity Phy-Sympathies Phys-Empathy
		Patients' Satisfaction & Practice Viability	Competition within Physician's Practices		Patient's Satisfaction Patient is Priority Practice Viability
			Physician's awareness of pharmacies behaviour		RQ+HPPR=RX dishonour
		Patients Adoption of other routes of treatment		Patient's switch to Quack or Hakim Pat-switch-spiritual treatment	
	<b>Physician's Interaction or Relationship With Other PSRs</b>	Exposure of firms' and experience of alternative products			Phy-Plist-Relation-other PSR's Efficacy-doubt-clinical-exp Mech-clinical-exp

### 3.9.3 DATA INTERPRETATION

In qualitative data analysis, coding is seen as one important and integral part of the analysis that facilitates the researcher in managing the bulk of data into reduced and meaningful form for further analysis (Bryman, 2008b; Miles & Huberman, 1994). However, there are a few limitations with coding as well, e.g. losing the context of what is said and fragmentation of data, that is, the disconnection in the flow of narrative (Bryman, 2008b;

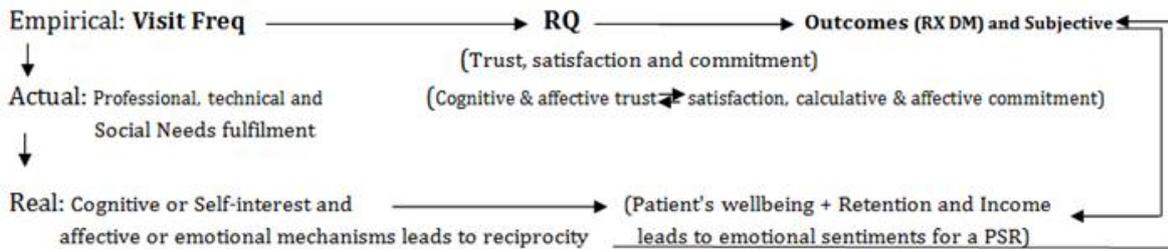
Layder, 1998). Therefore to deal with these limitations with coding, Maxwell (2012) suggests combining coding with connecting strategies.

The most common of these strategies are narrative descriptions and memo writing (Miles & Huberman, 1994). In the narrative description a researcher can set up the narrative summaries code by code (Miles et al., 2013) and the focus is on what is said by the participants in their stories (Riessman, 1993). This helps the researcher to interpret the data within the context of a story and its association with other aspects of the story. On the other hand, the memo is considered as extension of narrative summaries as it is an analytical document (Miles & Huberman, 1994). According to Layder (1998, p. 58) "memo writing involves researcher in creating the notes, which ask questions, pose problems, suggest connections, and so on about how the properties of concepts or categories are revealed, exemplified or contradicted in some way by the incoming data and the process of coding". This requires on the part of the researcher a continual assessment with reflexive thinking of what the data means (e.g. by asking how, what and why questions) in order to produce explanations (Layder, 1998; Miles & Huberman, 1994). According to Miles et al. (2013) good explanations require the researcher to link the explanation by combining coding with the connecting strategies (narrative description and memos).

As previously stated, short summaries of each interview were developed. Furthermore, memos were also written by considering the relationship between the data categories within one theme or sub-theme but also with the categories of other themes or sub-themes. This helped me to analyse and interpret the data by considering critical realism's account of relationships between different data categories to produce explanations through the effects of their associated underlying mechanisms (Maxwell, 2012). That is to say I identified the key relationship or underlying mechanism that connected two themes or its categories together, which required retroductive inferences that helped me in moving from the data in the empirical domain to the actual and real domain to identify the underlying causal factors or mechanisms (Danermark et al., 2002; Lawson et al., 1998; Sayer, 1992).

For example, empirical data were interpreted by asking questions such as why PSR's visit frequency was needed to develop PSR-physician's RQ, which helped me to identify the underlying mechanisms. This is because an appropriate visit frequency (i.e. at least fortnightly or, if possible, weekly) was actually required to fulfil the physician's professional technical, and social needs. The fulfilment of the different level of needs by a PSR through visits, led to the physician's trust in, satisfaction with, and commitment to the PSR. However, different levels of trust (i.e. cognitive and affective) and commitment (i.e. calculative and affective) emerged due to the activation of different mechanisms. That is, self-interest comes to the fore due to the cognitive evaluations of the PSR's performance in fulfilling the physician's professional and technical needs in terms of updating physician's knowledge of particular product for patients' wellbeing and retention. Emotional mechanisms appear due to the level of psychological satisfaction and extent of social need fulfilment resulting from the PSR's visits. Both of these, physician's self-interest and

emotional mechanisms, engendered the reciprocity mechanisms that influenced the physicians' prescription decision making in terms of a PSR's product. The process of data interpretation and causal explanation through identification of mechanisms is outlined below in figure 3.2.



**Figure 3.2: Data interpretations and causal explanations by identifying mechanisms**

The adoption of such stated processes (i.e. coding and interpretations) not only helped me identify RQ determinants, and underlying mechanisms, but also the interaction of mechanisms related to product price and patient's contingent economic conditions in the context of Multan, Pakistan (see chapter 4).

Similar to phase one, second phase data was also analyzed with the help of written summaries and memos, which were developed throughout the reading and coding process to develop sub-themes, categories and sub-categories. In terms of my critical realist position, these sub-themes, categories and sub-categories were analyzed and their interpretations made by considering them at the domain of the actual to verify and identify their associated mechanisms at the domain of the real. Therefore, the main units of analysis were the mechanisms linked with different data categories and their interaction under particular patients' economic context (i.e. urban and rural areas) to discover outcomes in the form of physicians' prescription decision making. That is to say, the physician's particular prescription decision that can be observed in the empirical domain is activated by the presence of different mechanisms and their activation at the domain of the actual and the real. RQ objective outcomes were then assessed by comparing and configuring mechanisms confirmed from the physicians' responses operating in two different contexts, i.e. rural and urban sales areas of Multan division (see chapter 5).

### 3.9.4 DATA PRESENTATION

The findings presented in chapters four and five are supported by verbatim quotations from participants, which were translated from Urdu to English. Although the translation was made literally, some words were added when clarification was needed about the topic that participants were referring to. Furthermore, irrelevant segments of narrative that produce confusion were skipped or removed, which is indicated by an ellipsis [...]. Finally at the end of each quotation the unique identifier or code used within the square brackets [GP-1] for instance, to show the source of the quote.

### **3.10    QUALITY OF RESEARCH**

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Braun and Clarke (2013) discuss that there is no universal assessment of quality but various criteria are available to ensure and judge the quality of qualitative research. This is because of differences in the philosophical underpinnings, such as ontology and epistemology, which guide the methodology of particular qualitative research projects (Robson, 2011). Therefore a researcher's "adoption of critical realist approach has an impact upon the criteria used to ensure rigorous and meaningful results" (Neergaard & Ulhøi, 2006, p. 412). From a realist point of view, Healy and Perry (2000) identified six criteria that can be used to evaluate and establish the quality of a case study research conducted by following critical realism's ontology, epistemology and methodology (Neergaard & Ulhøi, 2006).

At the ontological level Healy and Perry (2000) develop two criteria, i.e. ontological appropriateness and contingent validity. The implication of ontological appropriateness is that the research deals with complex social phenomenon and the focus of contingent validity is on the validity of mechanisms that operate in an open system and their activation contingent upon a particular context. Therefore, consideration of the context that makes mechanisms contingent is the central criterion (Neergaard & Ulhøi, 2006).

The third out of six criteria related to critical realism's epistemology is multiple perceptions of participants and of peer researchers. Healy and Perry (2000) discuss that unlike constructivists, a critical realist researcher does not consider a participant's perception as reality but as a window to reality that can be triangulated with perceptions of other participants in order to generate multiple perceptions about a single reality. This can be further triangulated with the interpretations of other peer researchers.

The final three quality criteria are related to the realist's methodological principles i.e. methodological trustworthiness, analytical generalization and construct validity. Methodological trustworthiness deals with the description of rigorous procedures such as the development of a case study database, case selection and interview protocols etc. (Neergaard & Ulhøi, 2006). According to Healy and Perry (2000, p. 125) analytical generalization deals with the initial theory development that can be confirmed or disconfirmed through data generation, and a resulting theory or model should be presented that can be tested further at a later stage. Finally construct validity refers to "how well information about the constructs in the theory being built are 'measured' in the research" (Healy & Perry, 2000, p. 125). Table 3.10 below outlines how these quality criteria were addressed in this research.

**Table 3.10 Quality criteria based on critical realism used in this research.**

Level	Criteria	Strategy in this Research
Ontology	<p>1. Ontological appropriateness</p> <p>2. Contingent validity</p>	<p>Research problem is based on why RQ between PSR-physician is needed and how far product's price has an impact on the PSR-physician's RQ objective outcomes, under contingent economic conditions of patients in the context of Pakistan (see chapter 1, section 1.2).</p> <p>The research questions are in-depth in that they not only seek the exploration of determinants that a PSR needs to develop RQ with a physician, but also why they were needed by means of identification of underlying mechanisms and their explanation in the contingent context of Pakistan (see chapter 1, sections 1.2 and 1.3).</p>
Epistemology	<p>3. Multiple perceptions of participants and of peer researchers</p>	<p>Multiple interviews were undertaken with PSMs and physicians in Multan (both from urban and rural areas). Triangulation was done in terms of multiple views of participants about reality of the RQ phenomenon, its impact on objective outcomes in terms of physician's prescription decision making under contingent patients economic condition in the context of Multan, Pakistan. All the constructs that constitute the initial conceptual framework were based on peer reviewed literature on RQ and on physician's prescription decision making (see chapter 2).</p>
Methodology	<p>4. Methodological trustworthiness (the research can be audited by third person)</p> <p>5. Analytic generalization</p> <p>6. Construct Validity</p>	<p>Case study database was developed with the help of Atlas ti. All the procedures of case study approach, case selection and design, participants' selection, interview mode, process and schedule were informed (see chapter 3, section 3.5-3.6 and also appendices). Furthermore, steps undertaken for data analysis were discussed (see chapter 3 section 3.9). Finally findings are supported with relevant quotations from data.</p> <p>Based on research questions, a literature review was done to develop initial conceptual framework, which was used for first phase data generation leading to the development of a revised conceptual framework. Further, data was generated on the basis of this revised conceptual framework and theory was refined.</p> <p>All the constructs that constitute the initial conceptual framework were based on the review of literature on RQ and on physician's prescription decision making (see chapter 2) and triangulated from the findings of this case study, which resulted in the revised conceptual framework (see chapters 4 and 5).</p>

*[Source: cited in (Neergaard & Ulhøi, 2006, p. 413), based originally on (Healy & Perry, 2000, p. 122)]*

### **3.11 ETHICAL CONSIDERATIONS:**

The entire research was undertaken by conforming to the University of Gloucestershire's Handbook of Research Ethics. The participants were informed about the research prior to data generation and provided with an informed consent form including the information provided in this document. The data generation proceeded upon their willingness and audio recordings were made, when allowed. Participant's identities, specific job titles etc. or organization were not mentioned in the transcripts or the research outputs. The participants were informed about their full authority to not answer any of the questions or to withdraw from the research at any time. They were also informed that everything would be kept confidential and all information will be destroyed on the completion of the research work. Finally, physicians were also informed that this research did not require them to divulge any particular details on the part of any specific case or group of patients. Rather, it only dealt with the general economic conditions of the patients in their area as this pertained to their prescription decision making.

### **3.12 CONCLUSION:**

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This chapter has described the rationale of procedures that were used to derive the findings of this research. The overall aim of this research was to critically explore the determinants and associated mechanisms that contribute to PSR-physician's RQ. A further aim was to investigate how far product price (and its related mechanisms) had an impact on the 'outcomes' of PSR-physician's RQ, in terms of physician's prescription decision making under patients' specific economic situation - in the context of Multan, Pakistan.

Initial sections of this chapter provided the perspectives of three competing research philosophies and expressed why critical realism rather than positivism or constructivism was more suitable for the purpose of this research. Critical realism believes in an open system of inquiry and emphasises outcomes resulting from contingent conjunctions of mechanisms. Later sections established that underlying processes or mechanisms can be better explored and explained through qualitative methods. Such explanations first require the identification of underlying mechanisms and then verification of how these mechanisms interact within different contexts to produce certain outcomes. Furthermore, this also established that critical realism lends itself to a case study strategy that enables the analysis of the objects under study, the relationships between them and the causal powers they hold. Therefore, an embedded qualitative case study approach was considered and semi-structured interviews were adopted in order to address this research's aims and objectives. Last but not least, participant (i.e. PSMs and physicians for phase one and two of data generation) selection, rationale for semi-structured interviews and procedures for thematic data analysis have been described.

The next two chapters provide the findings, analysis and discussion that were achieved by following the analytical processes described in this chapter. Following the initial conceptual framework drawn from the literature review, chapter 4 provides the findings from the PSMs and physicians of Multan city, which helped in the identification of the mechanisms related to RQ, its determinants, impact of the price of a PSR's product and patients' economic situation to form the revised conceptual framework. Chapter 5 then extended the investigation one step further by means of the verification of the factors identified in chapter 4, and identification of a few more salient aspects from the perspective of physicians who operate in rural and urban sales areas of Multan division in Pakistan.

## **4 MULTAN SALES AREA**

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### **4.1 INTRODUCTION:**

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In this case study the determinants of relationship quality (RQ) will be identified from the respondents. Part A of this chapter begins by presenting the profile of the healthcare sector Multan Division; and details how pharmaceutical sales organizations and their pharmaceutical sales representatives (PSRs) approach physicians in order to establish the context of the findings that follows. Following this part B examines the pharmaceutical managers' (PSMs') and the physicians' understanding of RQ itself; and the determinants needed to build RQ between the physician and the PSR. Part C then moves on to examine respondents' perception of expected outcomes of RQ. Finally part C also examines respondents' explanation for the expected outcomes when RQ interacts with the higher price of a brand that a PSR promotes given the contingent patient's economic conditions that the physician is working with.

### **4.2 PART A CONTEXT OF MULTAN DIVISION: INTERACTION OF THE PHARMACEUTICAL ORGANIZATIONS AND THE GENERAL PHYSICIANS**

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#### **4.2.1 GEOGRAPHIC LOCATION AND POLITICAL ADMINISTRATION OF MULTAN DIVISION:**

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Pakistan is divided into four major political administrative units known as provinces (i.e. Punjab, Sindh, Khyber Pakhtunkhwa and Blouchistan). Each province is subdivided into divisions and currently there are 36 divisions in the four provinces. Divisions are further subdivided to smaller administrative units known as a district (156 in total) and each district spilt further into 'tehsils', (596 at present).

The Multan division is situated in the south of the Province of Punjab in Pakistan. The divisions adjacent to Multan are D. G. Khan, Bahawalpur and Sahiwal, which have their own districts and tehsils. Multan division comprises four districts: Multan, Vehari, Lodhran and Khanewal. Each of these districts have tehsils such as Multan city, Multan Saddar, Jalalpur Pirwala and Shujahabad, which collectively comprise the Multan district. Similarly, Vehari district comprises of the tehsils Burewala, Vehari and Mailsi. Likewise Lodhran district comprises tehsils Dunyapur, Lodhran and Kahrora. Finally Khanewal district comprises tehsils Jehanian, Kabir Wala, Khanewal, and Mian Channu (Pakistan Bureau of Statics Government of Pakistan).

Multan city is also the capital of the South Punjab, it is the fourth largest city in Pakistan, and together with other areas of Multan district it has the total area of 3720 km<sup>2</sup>. It is a very densely populated district with the average of 837.9 persons per km<sup>2</sup>. According to the census in 1998, the total population of Multan district was over 3.1 million (i.e. 42.18% urban and 57.82% rural) with an average annual population growth of 2.73% (Pakistan Bureau of Statics Government of Pakistan).

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#### 4.2.2 MULTAN DIVISION AS A GEOGRAPHIC SALES REGION:

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Multan as a pharmaceutical firms' sales territory is quite different from the political administrative region, as it includes some areas from the other political divisions discussed above. It comprises Multan city and its urban areas, which includes the physicians, consultants and professors working in Nishter Hospital (one of the major hospitals in south Punjab region) and other those practicing in different streets of the city. The sales areas other than Multan city are situated at considerable distance from Multan city and considered rural or in peripheral towns. Peripheries, or rural sales areas, are regarded by pharmaceutical companies as more deprived economically than the urban areas of Multan. In these rural areas, agriculture is still the main source of earnings, resulting in the lowest income per person not only in Multan but also overall among other rural areas of Pakistan. Families have more economically dependent members compared to those in urban areas (Jones, 2003). These areas consist mainly of Jalalpur Pirwala' Shujahabad, Muzaffar Garh, Khanewal, Jehanian, Kabir Wala, Mian Channu, Vehari, Burewala and Mailsi. These towns outside of Multan also have many adjacent smaller towns and villages, which are also included as a part of the pharmaceutical sales area or territory controlled by a PSM based in Multan. The usual sales areas are divided between the PSRs within the Multan division, giving each PSR some rural areas and some urban, as shown below in table 4.1a.

*Table 4.1a Usual sales areas or territories in Multan sales division*

<b>Sales Area or territory</b>	<b>Sales Areas</b>	<b>Covered By</b>	<b>Report to</b>
Sales Area or territory-1	Local Multan city (urban areas) + Khanewal, Kabir Wala, Mian Channu, Abdul Hakim & Tulamba (rural areas)	PSR-1	PSM-1
Sales Area or territory-2	Local Multan city (urban areas) + Jalalpur Pirwala, Shujahabad, Muzaffar Garh, Khan Garh, Ali Pur & Karor Pacca (rural areas)	PSR-2	
Sales Area or territory-3	Local Multan city (urban areas)+ Vehari, Burewala, Mailsi, Jehanian, Pul Baghar (rural areas)	PSR-3	

Apart from the sales areas or territories of Multan division discussed above, some pharmaceutical firms also cover D.G.Khan division from Multan either through the PSR based in D.G. Khan division; or through the PSRs based in Multan, who along with work in the local Multan city area, visit the D.G.Khan division on a weekly basis.

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#### 4.2.3 HEALTHCARE FACILITIES, GOVERNMENTAL SUPPORT & PATIENTS GENERAL ECONOMIC CONDITIONS IN MULTAN DIVISION AND ITS PERIPHERIES:

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The ministry of health government of Punjab Pakistan is responsible for health care delivery to patients through all hospitals, division health quarters (DHQs), tehsil head

quarters (THQs), basic health units (BHUs) and rural healthcare centres (RHCs). The total numbers of health facilities that the government provides are shown in table 4.1b below.

*Table 4.1b Government health facilities available in Multan Division*

Division/District	Hospitals	DHQs	THQs	RHCs	BHUs
Multan	3	0	4	8	76
D.G.Khan	0	1	1	9	51
Muzaffar Garh	0	1	2	13	71
Khanewal	0	1	3	4	82
Vehari	0	1	2	10	77
Layyah	0	1	3	4	40
Total	3	5	15	48	397

*[Source: Punjab Health Department (2017)]*

Government healthcare support for patients is often seen as inadequate both in the urban and rural areas of Multan, which results in the patients seeking services for their primary healthcare from private local physicians (e.g. Akram & Khan, 2007). This increases the cost of their overall treatment, which includes the physicians' fee and the cost of the medicines being prescribed by physicians. The overall cost further increases in the case of secondary care treatment because, in such situations, patients need to move from rural areas to urban Multan, because the secondary care treatment in rural areas is often unavailable and also where present, is considered unsatisfactory by patients (e.g. Akram & Khan, 2007; Muhammad, 2014).

Therefore, both in urban Multan and its rural peripheries, a huge number of private physicians' practices exist. Consequently, there is healthy competition between these physicians' practices, which are located outside of the government hospitals on different roads and streets. There are many private clinics in a single road or street, therefore, patients have easy access to numerous physicians in their local areas, as patients do not require any prior appointment to see these physicians. Physicians normally charge patients for their consultation, also for any internal dispensing of medicines and they prescribe other medicines on their letter head that the patient can buy from pharmacies.

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#### **4.2.4 PHARMACEUTICAL ORGANIZATIONS SALES OPERATIONS IN MULTAN SALES TERRITORY:**

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As a potential drug prescription market almost 700 licensed, and also a huge number of non-licensed firms, operate in Multan, which includes MNCs, national firms and franchise setups of national firms. However, the two major categories of the pharmaceutical firms (i.e. MNCs and national) comprise the vast majority of the Pakistani healthcare market. Table 4.2 below outlines the top 50 pharmaceutical firms along with their sales performance and ranking in terms of their value, given in Pakistani-rupees.

**Table 4.2 Top 50 Pakistan Pharmaceutical Firms by Value (Source: IMS MAT Q3 2016)**

Total Market Size		314,512,264	17.10%	100.00	Total Market Size		314,512,264	17.10%	100.00
#	Name of the Firm	Total Value +000	Growth+-	Share %	#	Name of the Firm	Total Value +000	Growth+-	Share %
1	GSK	24,036,033	7.50%	7.64	26	MORINAGA	3,579,757	42.40%	1.14
2	ABBOTT LAB PAK	19,734,142	16.20%	6.27	27	ELI LILLY	3,246,038	17.70%	1.03
3	GETZ PHARMA	18,152,989	18.10%	5.77	28	MEIJI PAKISTAN	3,077,386	12.30%	0.98
4	SAMI	15,609,772	17.50%	4.96	29	ICI PAKISTAN	2,881,575	-11.60%	0.92
5	THE SEARLE COMPANY	11,419,484	22.50%	3.63	30	RG PHARMA	2,849,744	93.70%	0.91
6	SANOFI AVENTIS PAK	10,844,335	14.80%	3.45	31	MACTER	2,759,742	53.10%	0.88
7	PFIZER INC	9,929,023	6.30%	3.16	32	ROCHE	2,735,919	2.80%	0.87
8	NOVARTIS PHARMA	9,034,516	5.90%	2.87	33	TABROS PHARMA	2,619,777	20.90%	0.83
9	HILTON	8,970,931	21.60%	2.85	34	NABIQASIM	2,576,085	12.70%	0.82
10	FEROZSONS	8,674,368	14.20%	2.76	35	ASIAN CONTINENTAL	2,360,998	18.20%	0.75
11	OBS	8,439,865	2.60%	2.68	36	HELIX PHARMA	2,068,098	22.70%	0.66
12	GSK CONSUMER	8,319,350	15.40%	2.65	37	NOVO NORDISK	1,992,859	32.10%	0.63
13	BOSCH	8,266,781	30.90%	2.63	38	SHAIGAN PHARMA	1,970,425	15.40%	0.63
14	HIGH Q INT	7,198,808	37.50%	2.29	39	CHIESI FARMACEUTICS	1,965,486	15.80%	0.62
15	MERCK PVT LTD	7,193,268	4.50%	2.29	40	PLATINUM	1,920,171	16.80%	0.61
16	BARRETT HODGSON	6,095,619	20.90%	1.94	41	BROOKES	1,877,088	28.80%	0.60
17	NESTLE PAKISTAN	5,782,280	23.50%	1.84	42	SJ & G FAZUL	1,814,355	41.00%	0.58
18	ATCO	5,597,806	24.70%	1.78	43	GENIX PHARMA	1,809,497	55.30%	0.58
19	MARTIN DOW	5,138,398	21.10%	1.63	44	WILSHIRE	1,768,666	21.00%	0.56
20	BAYER PAK	5,006,694	17.50%	1.59	45	RECKIT BENKISER	1,720,066	40.10%	0.55
21	HIGHNOON	4,647,371	19.70%	1.48	46	WERRICK PHARMA	1,658,592	2.80%	0.53
22	INDUS	4,202,721	8.60%	1.34	47	SERVIER	1,458,749	7.40%	0.46
23	GLOBAL PHARMA	4,075,263	16.50%	1.30	48	SAFFRON PHARMA	1,444,210	21.80%	0.46
24	CCL	3,960,059	22.90%	1.26	49	WOODWARDS	1,418,984	13.60%	0.45
25	PHARMEVO PVT LTD	3,940,691	20.40%	1.25	50	WILSONS	1,400,441	9.90%	0.45
<b>Top 100 Firms Value Wise Share</b>									
Firms		Value	Share%	Firms		Value	Share%		
Top 10 Firms		136,405,593	43.37	Top 60 Firms		288,648,806	91.78		
Top 20 Firms		203,440,462	64.68	Top 70 Firms		294,709,891	93.70		
Top 30 Firms		239,899,557	76.28	Top 80 Firms		298,703,777	94.97		
Top 40 Firms		262,869,117	83.58	Top 90 Firms		301,556,245	95.88		
Top 50 Firms		279,239,765	88.79	Top 100 Firms		303,588,532	95.53		

MNCs established their operations after the independence of Pakistan and they are based on their research products, therefore enjoy a more trustworthy image among healthcare professionals. National companies, however, started their operations later in the early 1970s and they are entirely based on generic, or me-too, products. Franchise setups include those who buy a marketing right to a product(s) for certain allocated area(s). Almost all of the MNCs and national firms have divided their product portfolios in different groups; therefore, there is a huge sales-force from these firms that interacts with physicians in order to sell their products and there is intense competition between the firms mainly due to the presence of the generic or me-too products.

Pharmaceutical sales representatives who are based in Multan by different firms not only cover local sales territories of Multan but also frequently visit physicians in their allocated peripheral rural sales areas. PSRs are responsible for promoting their products and also developing their relationships with the local physicians to generate higher prescription share to achieve their allocated sales quotas (Andaleeb & Tallman, 1996; Scharitzer & Kollarits, 2000). Thus, relationship based selling becomes more important for PSRs, especially when physicians have hundreds of brands available to prescribe under one product category with varying prices. Therefore, pharmaceutical firms through their PSRs apply many tactics to build their relationships with physicians as their potential customers. Mainly, this includes the delivery of product-related information services through PSRs, knowledge-based clinical meetings, seminars, educational scholarships, free product samples, clinical support equipments, gifts, business and family dinners etc. These services facilitate PSRs to build relationships with physicians who have the prescription decision making power on behalf of patients.

The above section has outlined the background of this case study in order that the perceptions of the interviewees can be better understood in context. The following section describes the interviewees.

### **4.3 INTERVIEWEES**

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Five pharmaceutical sales managers and three physicians from city of Multan were interviewed for phase one data generation to gather their perceptions of RQ with physicians, in terms of the determinants involved and the expected outcomes. Both PSMs and physicians were also asked about the expected outcomes when RQ interacts with product price under the contingent patient economic conditions. Their characteristics are outlined above in table 3.2 and 3.3 (please see section 3.6.1 in chapter 3).

### **4.4 PART B: INTERVIEWEES PERCEPTION OF RQ DIMENSIONS & DETERMINANTS:**

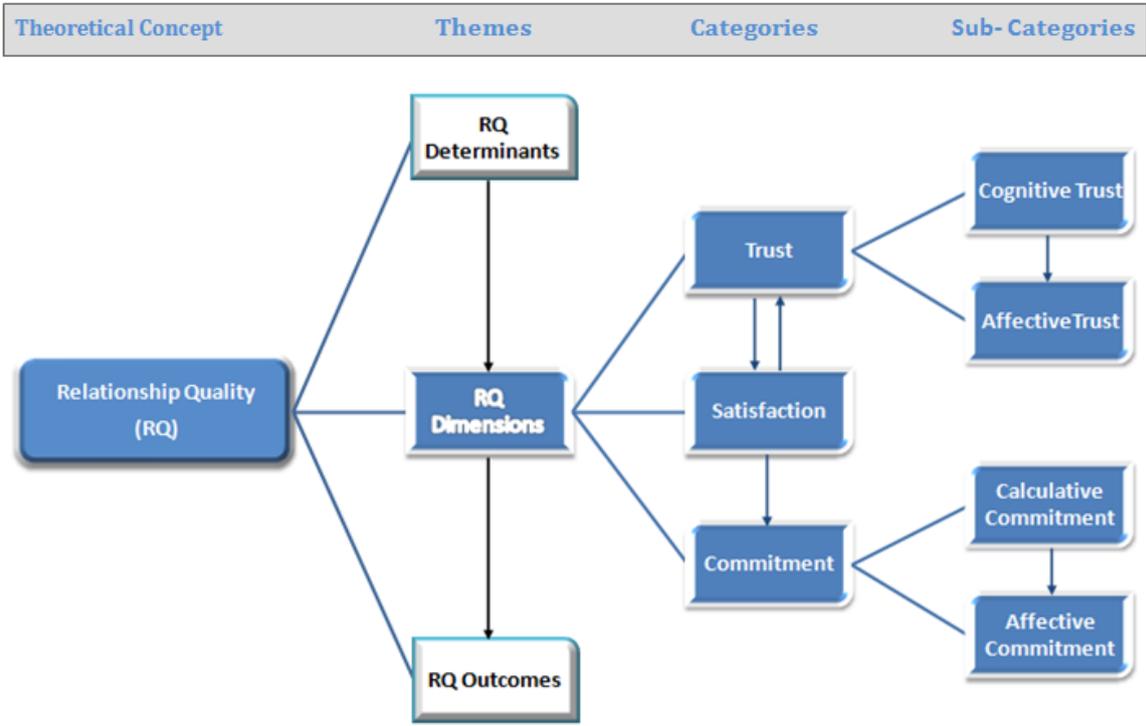
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The primary focus of part B of this chapter is to examine the pharmaceutical sales managers' (PSMs) and the physicians' (GPs) perception of RQ and its dimensions and their understanding of the RQ determinants that develop RQ with the physicians. Firstly,

section 4.4.1 examines the dimensions of RQ. The subsequent section, 4.4.2, then examines the determinants that influence these dimensions of RQ in the context of Pakistan.

**4.4.1 INTERVIEWEES PERCEPTION OF RQ DIMENSIONS:**

In order to explore the determinants of RQ, it was crucial to evaluate the PSMs' and physicians' perception of RQ itself. Therefore, the scope of this section is to understand the respondents' ideas about what they meant by RQ and accordingly what determinants are required to develop RQ. The following sections provide the respondents' views on RQ (i.e. trust, satisfaction and commitment). The themes, categories and sub-categories identified are outlined in figure 4.1.



*Figure.4.1: PSMs' and Physicians' Perception of RQ's Dimensions*

The sub-categories of trust (i.e. cognitive and affective trust) and commitment (i.e. calculative and affective commitment) are explained from the responses of the respondents in the section 4.4.2, as these sub-categories emerge from the effect of the different RQ determinants.

**4.4.1.1 TRUST:**

The PSMs measured their RQ with the physicians in terms of the RQ outcomes, such as sales or prescriptions share, more time with physicians, recognition and personal information sharing with the PSR etc. However, when probed with the questions like

'why you observed such RQ outcomes' and 'what is their basis', the PSMs provided the following responses:

***The doctor will judge that how the person (PSR) is coming to visit him addresses his concerns. And if the person addresses the doctor's concerns then the doctor will develop his trust in the person. Therefore, the doctor thinks, if the PSR is good enough, it means his medicine will also be good. Let's do business with him, and that is why relationships with physicians are very important [PSM-1].***

The above quote from the PSM signifies that he had an understanding about trust as a necessary construct for the development of RQ as he directly uses the word 'trust'. For instance, the quote gives the impression that the physician trusts the PSR, when he addresses the physician's concerns. This implies that the products or services offered must meet the physician's expectations developed as a result of the claims made by the PSR. The literature on buyer-seller relationships also suggests that trust develops as a result of buyer's evaluation of promised versus delivered performances by the seller's products or services (Wray et al., 1994). The physicians are then involved in evaluations of the interaction episodes and it takes time to develop trust in the PSR (Lagace et al., 1991). Therefore, if the PSR fulfils the promises made, they will gain the physician's trust. As the physician develops his perception about the PSR's sincerity, this is integral in order to develop trust. The PSMs frequently stated the word 'sincerity' to interpret the trust in their responses as illustrated in the following quote:

***Because in pharmaceutical sales we keep meeting with the same customer continuously -in order to develop the customer's confidence- that shows we are with you and we are sincere to you [PSM-2].***

This also reflects that the PSMs were aware that the demonstration of the sincerity and benevolent (caring) intentions from the PSR during the interactions are very important to develop RQ with the physician. The significance of the statement from the PSM '***we are with you***' also shows that the PSR's integrity or honesty with the physician is also required in order to develop the physician's trust. This is also in line with the literature, where trust is also seen as beliefs, sentiments or expectations of the individual on the honesty and the trustworthiness of his/her partner (Crosby et al., 1990; Moorman et al., 1992; Morgan & Hunt, 1994; Rasila, 2010). Further, this also accords with Morgan and Hunt (1994, p. 23) who define trust as "one party's confidence in the exchange partner's reliability and integrity". A similar assertion was given by the physicians in their responses as illustrated in the following quote:

***I will say that they should be honest to their profession [GP-3].***

The PSMs also related trust with its outcome in terms of the exchange of personal information alongside professional discussions by the physician with the PSR.

***When there is a good relationship between doctor and PSR, then the doctor can share his personal information with the PSR. Therefore, basically development of the doctor's trust in the PSR is required [PSM-3].***

The meaning of this statement is that trust must be present in order to enable the customer (physician) to take risks (McAllister, 1995). Therefore, this enables customers to exchange their concerns and needs openly, which helps the salesperson in better meeting customer needs and consequently enhancing RQ (Boles et al., 2000). The above quotes from the PSMs and the physicians reflect that they had a clear idea of the necessity for a physician's trust in the PSR for the development of RQ.

#### **4.4.1.2 SATISFACTION:**

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The PSMs were also aware that not only physician's trust in but also satisfaction with the PSR is also needed in order to develop quality relationships. The following is illustrative of many similar quotes that demonstrate the importance of satisfaction along with trust in order to develop RQ.

*Customer satisfaction is most important when we talk about the development of the strong relationships with the customer. This point is most important and if we discuss any relationship other than the physician-PSR relationship, the notion of trust and satisfaction is also very important [PSM-4].*

However, their explanations give the impression that trust and satisfaction are interrelated but distinct constructs. As satisfaction is not only required for the quality relationships but also trust cannot be developed until, and unless, the physician feels satisfied with the PSR's previous interaction history. The literature on satisfaction also suggests that quality of interaction between customer and service provider influences the customer satisfaction (Shamdasani & Balakrishnan, 2000). Therefore, cognitive and affective assessment is based on a customer's personal experiences across all the interaction episodes within the relationship (Storbacka et al., 1994). Moreover, it is 'human psychology' to keep evaluating on other's actions or behaviour both consciously or unconsciously, as stated by one of the PSMs:

*Relationships cannot be developed and nobody can benefit in the absence of the mutual trust in each other. And trust can only be developed when somebody is satisfied with your previous history. That is how you behaved previously and how you are behaving now. Every one evaluates and this is the human psychology that he or she always in the process of the evaluations of others [PSM-2].*

This quote provides the explanation regarding the quality of interactions between the PSR and the physicians in order to achieve the physician's satisfaction, which leads to the trust. Similarly, another PSM associated trust with the satisfaction that can be achieved through product related quality and additional services. This is similar to findings of Crosby and Stephens (1987) that the customer's satisfaction can emerge from three different levels, which are: satisfaction with interpersonal interaction; satisfaction with the intangible aspect such as service; and satisfaction with the firm. The following quotes reflect the view of trust's linkage with satisfaction emerges through the fulfilment of the physician's needs and wants from the PSR in terms of services and product related quality or efficacy offered by the firm.

***Relationships are always based on trust but if the PSR is fulfilling the needs and wants of the physician with the efficacy of the drug and also adding value with other efforts then definitely it helps to develop the physician's trust in the PSR [PSM-5].***

***Trust and satisfaction are definitely required in order to establish good relationships. And there are multi-functions and multi-factors involved in it, i.e. not only the PSR's own personality but also product quality, both affect trust and satisfaction.[GP-1].***

Similarly, the physicians were not only aware about the importance of trust but they also stated that satisfaction with the PSR was essential in order to develop RQ. But they were also conscious that trust and satisfaction are affected by multiple factors e.g. quality of the products or services and the PSR's personality.

#### **4.4.1.3 COMMITMENT:**

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The PSMs were also cognisant about the reality that the physician's commitment with the PSR is a much more important construct that is needed to build and maintain quality relationships. They explained that trust and satisfaction are the first steps that facilitate the PSR to ask for a physician's verbal commitment to a product, as illustrated in the following:

***Trust and satisfaction are the first steps to get inside. [...] however, business will only come when you receive a physician's verbal commitment against the features and benefits of your product; [...] and when doctor gives the verbal commitment he or she becomes morally bound-the doctor thinks 'I have a good relationship and I have given the commitment also and he is the person I trust'. Then these things trigger him [PSM-1].***

The above statement is quite similar previous findings as commitment cannot exist without trust between the partners (Naudé & Buttle, 2000). The significance of the above statement is that by gaining the physician's trust and satisfaction, the PSR can ask for the physician's commitment. This is because the physician has developed trust in the PSR after having satisfaction with the products and services on offer. Apart from the verbal, commitment can also be engendered naturally because of the PSR's efforts in fulfilling the commitments on his own part. Consequently, the physician will reciprocate the PSR's efforts in terms of a high share of prescriptions to the PSR, as illustrated in the following quote:

***When the PSR fulfils the commitment on his part, it develops the physician's satisfaction with the PSR then the physician does not count the number of prescriptions he writes for the PSR's product. Because, he thinks positively about the PSR's efforts, for instance, physician thinks when he requested samples for the patient; PSR provided them on the same day. [...] Physicians note down everything and develop a perception of how sincere the PSR is with his job and in the development of quality relationships with the physician [PSM-1].***

This quote also echoes the findings of Gounaris (2005) who found that by delivering excellent products or services and effective relationship management, this helps customers in developing trust in and satisfaction with a salesperson. This thus leads to the customer's affective commitment with a salesperson; because, it emerges from the emotional sort of sentiments that come with the physician's evaluations of the PSR's care

and sincerity with the physician. However, another PSM viewed the commitment in terms of physician's cost-benefits analysis (i.e. more rational) of the PSR's inputs in terms of relationship investments. Upon satisfaction with the investments or benefits received, the physician's commitment to the PSR is achieved:

*It is natural that a person accommodates to someone whenever he or she feels satisfied with that person; [...] therefore, the physician will accommodate the PSR's commercial benefits in terms of sales. This is because the physician develops his trust in the PSR, when he or she has fulfilled physician's needs now it is the physician's turn to reciprocate. And it is not possible to maintain the relationships until both parties in relationships felt satisfied with each other. [...] If the physician is not committed to the PSR, he or she will not be committed to doing business with the PSR. In that case all your efforts have gone in vane-you will get nothing from him or her [PSM-2].*

The physician's commitment to the PSR is necessary in order to achieve the firm's core objectives (i.e. sales). Therefore, according to the responses from the PSMs, a physician's commitment to the PSR is an indispensable condition otherwise there is no benefit to develop such relationships. Moreover, this can possibly lead to the relationship's termination. The literature on commitment also suggests that commitment is important in order to maintain the relationship (e.g. Moorman et al., 1992). The following quotes from PSMs provide explanations with regards to the importance of the physician's commitment to the PSR. However, they measure the physician's commitment in terms of the physician's share of prescriptions to the PSR.

*If there is no business activity from the physician then it means that he is not committed to the PSR and the relationships between the PSR and physician is only limited to chit-chat. [PSM-2]*

*Being a salesperson your ultimate goal is to achieve the company's commercial benefits. After all our efforts, if we are not converting our strong relationships into business then it might be that we are not converting our personal relations into professional. So, definitely, if relationships convert into prescriptions or business then we can say that we hold strong relationships with the physician and also that the physician is committed to us [PSM-4].*

Physicians also acknowledged that the PSR receives the relationship benefits in terms of prescriptions. And if a physician does not cooperate in this regard it will lead to relationship termination:

*The PSR receives the benefits of relationships in the form of sales but if they do not get the prescriptions they feel disheartened- and doctor also feels their loss of motivation [GP-3].*

The physician used the word disheartened to give the impression that the physician's commitment to the PSR in terms of prescriptions is a necessary condition for the relationship's durability and maintenance. Otherwise, this leads to a fall in the PSR's motivation to continue the relationship and it can be terminated ultimately.

In summary, there was a clear perception amongst PSMs and physicians that linked to the impression the trust, satisfaction and commitment were distinct but interrelated constructs that constitute RQ. Physicians trust in a PSR can be developed through satisfaction with the product(s) or service(s) offered by the PSR and sometimes trust in PSRs leads to the physicians' satisfaction with product(s) or service(s) the PSR offers. Similar to Crosby et al. (1990) their explanations also suggested that trust and

satisfaction are only the entry conditions that enables the PSRs to take physicians' commitment (in terms of giving their prescription to PSRs). Moreover, in line with literature they also confirmed that physicians' commitment to a PSR is also a vital construct in order to maintain RQ in the longer-term (e.g. Ivens & Pardo, 2007). This therefore, established that trust, satisfaction and commitment were the necessary conditions in order to develop long-term quality relationships between PSRs and physicians. The next section examines the determinants of RQ that are required and how they affect trust, satisfaction and commitment, including their sub-categories.

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#### **4.4.2 INTERVIEWEES PERCEPTION OF RQ DETERMINANTS:**

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In order to identify RQ determinants, the following section examines the views of the pharmaceutical sales managers (PSM) and general physicians (GP) concurrently. The themes, sub-themes, categories and sub-categories identified are outlined in figure 4.2. The categories shown in dark blue coloured blocks emerged from the respondents' responses; whereas the categories in turquoise blocks were considered in the initial conceptual framework drawn from the literature review and verified by the respondents as RQ determinants.

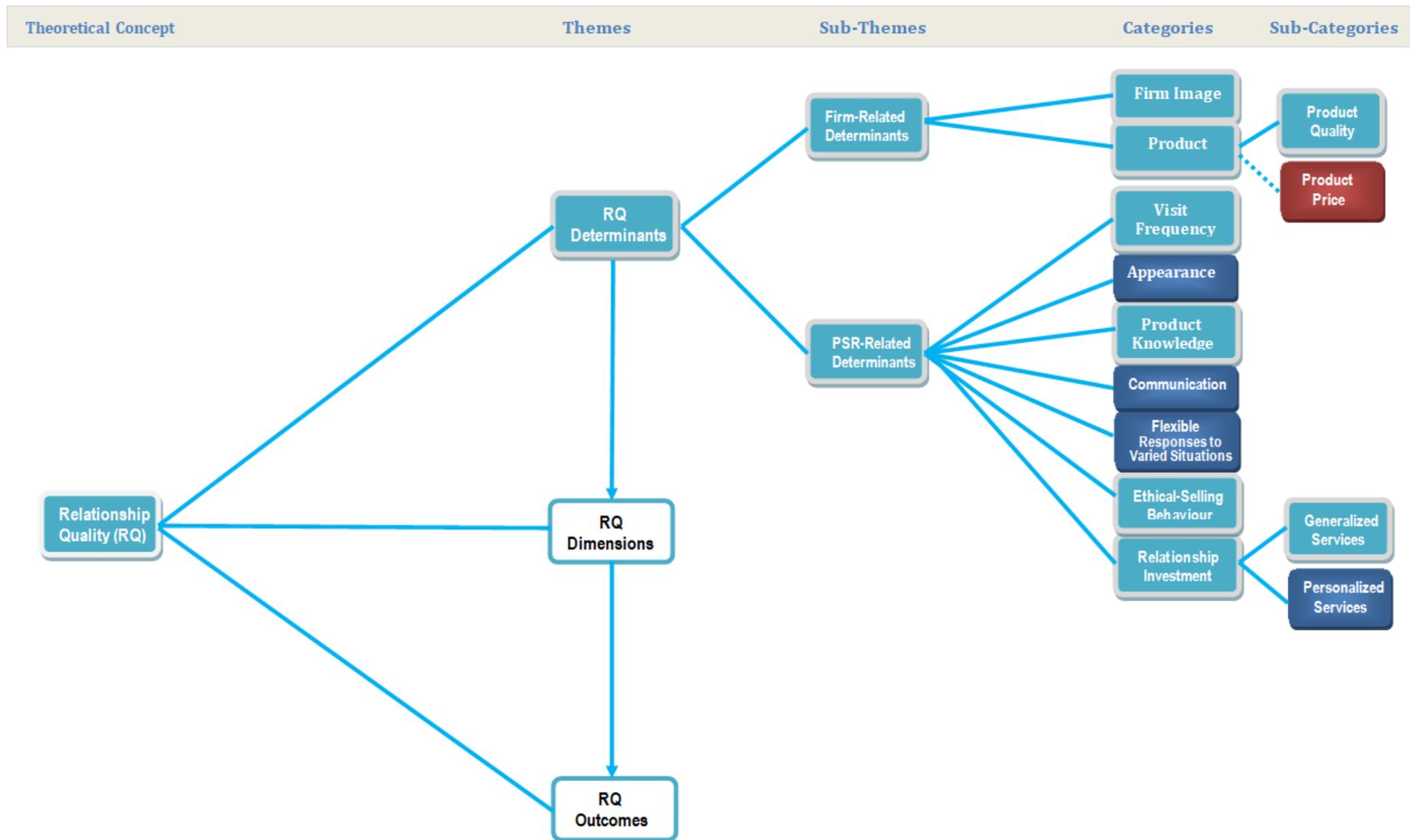


Figure.4.2: PSMs' and Physicians' Perception of RQ Determinants

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#### **4.4.3 FIRM RELATED RELATIONSHIP QUALITY (RQ) DETERMINANTS:**

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The firm related determinants (FRD) sub-theme connects to the RQ determinants theme and has two categories, which are: firm image; and the product offered by the firm. The data category product has two further sub-categories, which are: product quality, which is identified as one of the RQ determinants; however, the second, product price, is shown in a red colour block and indicates that this is one of the barriers that can interact with RQ outcomes in terms of a physician's prescription decision making. The firm and its product(s) as the entities of the pharmaceutical selling structure have their own causal powers or properties. This can affect the relationship between the physician and the PSR as evident by the responses of the interviewees. The following subsections examine the influences of these constructs in the development of RQ between the PSR and the physician.

##### **4.4.3.1 FIRM IMAGE:**

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All the PSMs and the physicians accepted that the firm image was a necessary determinant to develop RQ between the physician and the PSR. This is because, in Pakistan there are more than seven hundred licensed pharmaceutical companies, ranging from multinationals to nationals and franchised setups. The PSMs reported in their responses that in Pakistan physicians have more trust in the MNCs and the top ten national organizations, compared to newly formed or unknown firms (e.g. franchised-setup) due to their image. In this context, the MNCs started their operations immediately after the creation of Pakistan in 1947, and the national firms started their operations nationwide in the early 1970s. However, the franchised-setups are small firms and every year there is a tremendous growth of such new firms. Furthermore, unlicensed companies also operate in Pakistan. This leads to physician uncertainty, therefore the level of the physicians' trust in firms is quite different depending on the age and the level of the firm's operations.

The MNCs and the top ten national firms, through their PSRs, generally interact and provide the physicians with medical information services and products for many years. Therefore, physicians already know about firms, the quality of their products and the PSRs (in terms of product knowledge) compared to the newly launched firms in Pakistan. Consequently, with the passage of the time physicians develop positive image perception of these firms based on their performance criterion of product related quality and their medical information services. This tendency is confirmed by Ou et al. (2012), who suggest that a firm's image develops as the result of a customer's long-term assessment of the firm's positive actions and performance in favour of a customer, which engenders the customer's trust and satisfaction with a given firm. Therefore, the PSRs who represent these firms develop RQ with the physician much earlier than competitors' PSRs, as illustrated in the following quote:

*Now if you see the level of physician's trust in the PSR of the top ten national or multinational firms will be something else as compared to the PSR of the newer company or franchise set-up. Therefore*

***the company behind the PSR has a huge impact because the confidence level of the PSR of a good company as compared to the company that has no good reputation as their product knowledge will not be sound. Secondly, doctors hold great confidence in a firm that has a good image-that helps a PSR in early development of the relationships [PSM-5].***

The above quote from the PSMs signifies that the physician's perception of a good firm image can be derived from the PSRs' level of the product knowledge (examined later in section 4.4.3.2 (a) on product quality) communicated to the physicians. It appears that physicians in Pakistan believe that the good firms invest much more in their PSR's training. Therefore, a physician's confidence and reliance in the information communicated by the PSRs of such firms is much higher compared to new or unknown firms. This is especially true because physicians make their day to day prescription decisions for patient wellbeing, based on the information provided by PSRs. Physicians perceive this sort of investment in the PSRs' training as valuable for them and it leads to the development of physicians' perception of the firm's good image. The literature on firm image has also discussed that the customers' perceived firm image can be seen as the extent to which customers believe that a supplier firm is fair, honest and concerned about its customers goodwill (Doney & Cannon, 1997, p. 37). The physicians also stated in their responses that the MNCs, and a few national firms are better reputed as compared to the others, as demonstrated in the following quote:

***You know a company's name counts and it takes many years to develop that sort of standing in the market. MNCs hold their own worth as when you prescribe their products and patient does not recover, then you feel there is a something wrong with the diagnosis of the disease. But if the same situation happens while you have prescribed the product of a national firm or a firm that does not hold any worth, you feel that the medicine is the problem. But, now the top ten Pakistani firms have also improved their efficacy [GP-3].***

In their explanations the physicians associated the firms' reputation or image more with the delivery of superior product quality for the patients' benefits (examined in next section). As discussed above they believe in the MNCs and the top ten national firms' product quality much more as they have the experience of many years of prescribing the products. The above explanations reflect the views of both the PSMs and physicians, which link the impression of firm image with the quality of the product and the quality of the PSR in terms of the effective knowledge delivery. The literature on the physician-PSR relationships provides similar assertions. For instance Scharitzer and Kollarits (2000) discuss that in the context of pharmaceuticals a positive firm image emerges with the delivery of excellent products and medical information services offered to the physicians. Therefore, depending upon the satisfied interaction history with the quality of the product and the PSR, a physician maintains or holds a good image of the firm that helps the PSR develop RQ with physician earlier, as illustrated in the following, which represents the many other quotes (please see appendix-8, Q.1.):

***Definitely, if the PSR approaches the physician with a good firm image then 50% of their job will be done. This is because the doctor is sold on the company and knows its brands already therefore, developed his trust in PSR due to this good image of the firm. [...]. Otherwise if the firm image is not good then definitely, the PSR will have to wait for six months to gain trust. [...] Therefore, if the firm***

***image is good, physician will give the PSR more prescription share, and will develop more trust in the PSR [PSM-1].***

PSMs further explained that the trust in the firm then transfers to the PSR and helps in early development of physician's trust in the PSR, because the firm's name is attached to the PSR. Similarly Johnson and Grayson (2005) discuss that a customer's judgment of the positive reputation and trust in a firm has direct impact on the trust in a salesperson through a mechanism of transference as the source of a credible firm. This implies that physician's perception of the firm's image or credibility that a PSR represents has direct impact on the development of the physician's trust in the PSR and also the future relationship between them (Wright & Lundstrom, 2004). Similar explanations from the PSMs are illustrated in the following (please see appendix-8, Q.2 for another example):

***Physician trust in firm also transfers in the PSR because first of all a physician sees the PSR's visiting card with the firm's name on it. Therefore, firm's image definitely counts, as physician develops his perception in that form, which firm the PSR represents and how other people belonging to the firm work. But, this happens if they were working well and providing services as well [PSM-1].***

Although the PSMs agreed that the firm's image was helpful for the PSRs initially in order to gain a physician's trust, they also pointed out that this was an advantage that added value. However, to develop RQ further with the physician much more depends on the efforts of the PSR.

***A company's good image is a plus point, but it depends how the PSR uses this plus point. If the PSR is not well trained or skilful- the firm image will become negative for him or her [PSM-3].***

The physicians through their responses also confirmed the above explanations from the PSMs that the firm image helped the PSR at the initial level of trust development. However, they also stated this is not the only factor in the development of RQ. They reported that the role of the PSR and the quality of the products they sold counted much more in this respect, as illustrated in the following (also see appendix-8, Q.3):

***Yes I will say it will help a PSR initially as the company he or she represents exists for number of years; therefore I develop my initial trust due to the company's name. However, this will not be the stand-alone factor in the development of strong relationships. If the company is newer and unknown then I will see how the PSR introduces it and how the medicine he is promoting performs. Because, you cannot trust in a new company [GP-1].***

From the above assertion it is clear that in the context of Pakistan the image of the firm is particularly important due to the remarkable growth of new firms into the industry. This leads to uncertainty among physicians. The firm image removes that uncertainty from the physicians by involving physicians in the evaluation of performance of the firm that leads to cognitive trust in the PSR (e.g. Johnson & Grayson, 2005). This implies that, based on the previous performance of the firm (in terms of product(s) and services), a physician develops his positive expectations regarding the PSR's future performance. The physicians require a professional orientation from the PSR, as they are working for the wellbeing of the patient. Therefore, physicians' self-interest is involved here in order to ensure the quality of the products and information services that are offered to them in

achieving their goal of patient wellbeing. This is because they have to prescribe pharmaceutical products on the basis of the information communicated from the PSR. According to Doney and Cannon (1997), source credibility has significant associations with trust and buyer decision making since a communicator is perceived to be a source of valid assertions. However, in the instance of a new or unknown firm, it is difficult and time consuming for the PSR to develop relationships. The explanations regarding why this is linked again with the physician's concerns about the quality of the product and also about the PSR promoting the product. Consequently, a physician will evaluate how a product, as well as a PSR, performs in order to develop trust in the PSR and then in his firm. Nevertheless, according to explanations, firm image alone is not sufficient but that the way the PSR conducts in providing services and the performance of the product he or she promotes is also important. Since a physician operates in an open system and every entity (e.g. firm, product and the PSR) has to play its role in the development of RQ, the role of the product related quality is examined in the next data category i.e. product. However, factors i.e. determinants related to PSRs are examined in subsequent sections.

#### **4.4.3.2 PRODUCT:**

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The data category of product is also linked with the sub-theme 'firm-related RQ determinants' and has two further sub-categories: product quality and product price. Product quality is identified as one of the determinants of RQ. However, product price is shown as a red colour block in figure 4.2, indicating it is one of the barriers that interacts with RQ objectives or actual outcomes, according to the respondents. The following sections will examine the role of these constructs in the development of RQ.

##### **A) PRODUCT QUALITY:**

All the PSMs and the physicians (or GPs) in this study accepted that product quality was necessary and the most important determinant to developing RQ between PSR and the physician (i.e. GP). This implies that whilst the salesperson's quality of interaction fulfil the social needs of the customers, quality of the product or service is necessary for their technical needs fulfilment (Hennig-Thurau & Klee, 1997). One of the main reasons was the promotion of drugs by large numbers of different pharmaceutical organizations, as discussed in the section above. Consequently, this leads to the physician's uncertainty in deciding what brand should be preferred that can fulfil their technical needs. The MNCs have established an image of superiority in terms of quality control among the physicians in Pakistan. Therefore, physicians trust in the product quality of MNCs more than the national companies and the franchised setups (see section 4.4.3.1 above). However, when it comes to prescription decision making; the issue of the higher cost of the MNCs' products in relation to a patient's economic condition becomes relevant, and that forces the physician towards alternative products (please see more details below in the price interaction section 4.5.3). Therefore, the national firms, as well as franchised-setups, as producers of alternative products have to meet the physician's criteria of product related quality. That is, at least acceptable in terms of efficacy, in comparison with the MNC's

product quality. The following quote from one PSM is illustrative of the perception of product related quality provided by different firms.

***In Pakistan more than 700 companies are registered and I don't know about the un-registered companies, but 700 companies are registered. These firms do not all have the same level of product quality [PSM-1].***

The above statement signifies that product quality issues come to the fore, at least on the psychological level of the prescribers, with respect to the many firms that are promoting the same product with different brand names. This is because, all the respondents in this study were well aware that the government was issuing licences to a large number of firms without any strict regulations. There was also a lack of Governmental control over those that were unlicensed. This resulted in higher prescription share from physicians and the other prescribers to the top twenty pharmaceutical organizations. This orientation towards the top-twenty firms' products indicates the physicians' sensitivity towards the image of a firm. Consideration of the firm's image psychologically ensures physicians of the product's quality as the physician cannot compromise on product quality.

***If you make a comparison of the Pakistani market, the top 20 companies are getting almost more than 50% market share. This is because they never have to make a compromise on their quality of product [PSM-2].***

The above quote demonstrates the physicians' professional orientation towards patient's healthcare delivery. Being a healthcare professional, a physician's primary priority is to secure the patient's wellbeing at any cost. Therefore, product quality is required as it fulfils the physician's technical needs (Hennig-Thurau & Klee, 1997) in order to recover the patient from a disease or ailment as early as possible. The following quote is illustrative of many of similar comments from the GPs that provide their concerns and consequences regarding the absence of product quality with respect to the patient.

***Product quality has a direct relation with human life. Suppose a patient comes to me with typhoid infection and I prescribe him an antibiotic on the basis of PSR's claim that the ciprofloxacin he or she is promoting is very good in treating typhoid. However, this does not have any efficacy, despite the product pack claiming that it contains 500mg of ciprofloxacin but in actuality it does not. Therefore, the patient will not recover from typhoid and secondly it will cause drug resistance. And due to this, the next time it becomes very difficult to treat that patient. So, I have to take account of all such things [GP-3].***

Although, all the PSMs acknowledged the physicians' professional orientation with respect to patient benefits or wellbeing, however, they also provided another explanation that is linked with the physician's own-benefits. This is illustrated in the following quote which represents others (see appendix-8, Q.4):

***The patient is the physician's customer [...], so, definitely why would a physician prescribe a product that does not have quality as he or she will never want to lose the patient. Patient is physician's bread and butter because the patient pays the physician, so, physician's whole earning is dependent on patients. So, physician always wants patients to recover. Therefore, product quality matters a lot and it is in a benefit to the physician [PSM-4].***

The afore-mentioned quote from the PSM reflect the views on physicians' professional orientation, not only in technical but also in financial terms, which the physician achieves by ensuring product quality. In Pakistan there is also competition among physicians in terms of their practices (see section 5.4.2.3). If a physician fails to cure a patient quickly, there is a potential risk of the patient's withdrawal and shift to another physician. Hence, to make a practice viable, a physician must ensure product quality, as his or her earning is dependent on the number of patient visits to that particular physician. Physician trust in the product's quality is required to enable him in making a choice of the brand for the patient in order to avoid the risks discussed above.

Patient satisfaction with a physician is thus required in order to make a practice viable. The patient's satisfaction with the physician fosters physician's trust in and satisfaction with not only the product but also the PSR representing the product. The following quote from PSMs demonstrates the process of trust and satisfaction development with the product, and through the product with the PSR (please see appendix-8, Q.5 & 6):

***If the doctor is confident about the quality of product then he or she will prescribe. Because, the doctor will be confident enough in the details given by the PSR about the properties of the product. And if the doctor finds the same then definitely this will help in the development of the relationship. Therefore, the doctor will develop his or her trust and satisfaction due to the patient's recovery from the disease. [PSM-4]***

The above quote signifies the development of the physician's cognitive trust in the PSR. This involves physicians in the evaluation of what the PSR claimed and how the product performed accordingly. On finding a satisfactory response from patient's feedback regarding recovery from disease, the physicians' trust and satisfaction are developed both with product and the PSR (Lagace et al., 1991). However, in the event of non-compliance in terms of product quality the physician's trust and satisfaction with the PSR will never be developed. According to Human and Naudé (2014) customers are only motivated to continue a relationship if they receive a quality product that matches their expectations of added value in some way. Therefore, a PSR cannot continue the relationships with the physician without having a quality product. The importance of product quality and efficacy for the continuation of physician-PSR relationship was highlighted by PSM-2, 4, and 5 and is best summarized in the following quote (please see appendix-8, Q.7 & 8):

***If the doctor's trust in the medicine is shaken it will also be shaken in the PSR and their situation will not remain the same. Because, if the product quality is not good, it will be associated with a poor PSR. The doctor will think: this PSR comes from company X and has brought a non-efficacious medicine. So product quality is very important to achieve doctor's trust and satisfaction with the PSR because without this it is not possible to develop a good relationship with the doctor [PSM-2].***

The physicians also stated clearly that patient satisfaction with the physician is dependent upon product quality in terms of patient's recovery from a disease. And if the product does not respond according to expectations, the relationship between the PSR and the physician cannot develop, because the physician's trust and satisfaction with the

PSR will be distorted due to the product's ineffectiveness. The performance of the product will be attributed to the salesperson, and thus affect trust in the salesperson (Johnson & Grayson, 2005). The following quote from one GP show similar explanations (please see more in appendix-8, Q.9):

*It is very difficult to develop a relationship with the PSR if there is a problem in the quality of the product that a PSR is promoting. I will listen to his sales call but I will not prescribe a product that does not have any efficacy... that kind of product cannot come into my prescription because I cannot trust it and it cannot satisfy me. Therefore it is also not possible to develop trust and satisfaction with the PSR [GP-3].*

This quote indicates that the physician's trust and satisfaction with a product is required in order to achieve the physician's commitment to the product that a PSR is promoting. This implies that if the product works according to the physician's expectations (i.e. the patient recovers); then he or she will continue to extend the product's benefits to the patients in future and this reflects the physician's commitment to the product. Consequently, physician's commitment is given to PSRs promoting quality products. A similar assertion can be found in the findings of Čater and Čater (2010), who found product quality to be a necessary determinant of a successful and quality business relationship, influencing buyers' commitment that then further leads to their loyalty. The following quote from the PSM is illustrative of such a view (please see more in appendix-8, Q.10):

*If the patients are recovering it boosts the physician's confidence and the physician continues the product in succeeding patients [PSM-1].*

The above assertion clearly demonstrates that in the context of Pakistani pharmaceutical selling, product quality is a crucial construct in order to develop physician's RQ with the PSR. Since judgements on RQ will be made based on the quality of customer/salesperson interaction, product or service quality may also be influential (e.g. Bejou et al., 1998). This is because product quality is related to the physician's professional orientation towards the patient's wellbeing. This professional orientation is not only related to the physician's self interest to ensure the patient's wellbeing, but also the patient's retention as his potential customer. Patient retention is also dependent on patient satisfaction. This only can be achieved with the patient's early recovery from the disease, which is associated with the quality of the product prescribed by the physician. However, another important factor in prescription decision making regarding the product is its price, which emerged through the responses of the respondents. The role of the product price in this respect is examined in the following section.

## **B) PRODUCT PRICE**

Product price is identified as a second sub-category of the category 'product'. However, it is not considered as one of the RQ determinant in this study. This is because, according to the respondents, it has no direct effect on the development of RQ between the physician and the PSR, rather it has more effect on RQ outcomes. The following quotes indicate the

effect of higher product price on the outcomes of RQ that the PSR is expecting in terms of prescriptions from physicians.

***A strong relationship with the PSR can be developed due to the factors that I have discussed with you. But higher price can deter me in my prescription decision making [GP-3].***

***A strong relationship can be developed even though the price of a product is high. This is because the PSR may have a good personality; therefore the physician develops a good relationship with the PSR. And the physician will become involved in the discussions, perhaps offering the PSR tea. However, this relationship cannot be transformed into the form of prescriptions if the price of the PSR's product is high [PSM-1].***

The above quotes reflect that if the product price is high it will create a barrier in the physician's prescription decision making, as a majority of patients in Pakistan cannot afford high product prices. Previous studies have also identified that price does not have a significant effect on buyer-seller RQ development. For instance, the findings of a study carried out by Lin (2013) identified that customers' perceived price to not produce any barriers in developing RQ with customers. In fact, customers perceive high price as a signal of quality (Gönül et al., 2001). The notion of price and quality becomes clearer when physicians respond to lower product price:

***If the price is very low, then one cannot trust in it. For example, medicines come from China, India and Afghanistan ..... all these things are available [GP-2].***

The quote above shows the physician's perception that lower product quality is associated with lower product price and also in terms of the country of its manufacturing (e.g. China, India and Afghanistan). In Pakistan, products from these countries are believed to be low in quality, because they are sold at very low prices. Therefore, the physician becomes involved in price comparisons of the products of these countries with the available alternative products from other firms (MNCs and nationals) that have a good image. A large price difference between the products creates uncertainty for the physician and thus diminishes the development of trust in low price products. The following quote from a physician offers such a comparison for conflict resolution (i.e. deficit of trust) in order to make a prescription decision making for a patient having financial difficulties.

***There is efficacy doubt when you shift to alternatives (i.e. low price). But I try to prescribe any national company's product that has an efficacy near to the MNC or at least the raw material is bought from the same source the MNCs use. This gives me satisfaction [GP-3].***

The physician must be satisfied with the quality of the low price of product. Initially, the satisfaction is derived from the source of the raw material used, in comparison with the brand leader (usually an MNC) as stated in the above quote. It is similar to the assertion made by Doney and Cannon (1997) that source credibility has a greater influence on the buyers' trust that leads to their satisfaction. However, later satisfaction and trust in the product is derived from the patient's recovery from the disease. Therefore, given the above explanations from the respondents, it is clear that product price is associated with the quality of the product, which is considered a RQ determinant (already examined in 4.4.3.2 a). Hence, product price is considered a barrier for physician's prescription

decision making, contingent on the patient's needs and economic conditions. This results into the switch of the PSR's product with the alternative product of similar category at the lower price that a patient can afford (e.g. Al-Areefi & Hassali, 2013) even though physicians experience some uncertainty about its efficacy due to its lower price. This aspect is examined in more detail later in section 4.5.3 of part C of this chapter and then in chapter 5. The next section examines the perception of the PSMs and the physicians about the sub-theme 'PSR-related RQ determinants'.

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#### **4.4.4 PSR'S-RELATED RELATIONSHIP QUALITY (RQ) DETERMINANTS:**

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The sub-theme PSR-related determinants (PSR-RD) is also connected to the theme RQ determinants and has seven further categories, which are: the frequency of PSR's visits, appearance, expertise or product knowledge, communication, relationship investment, adoptive selling behaviour, and ethical selling behaviour, as shown in fig. 4.2. The subsequent sections examines the contribution of these constructs in the development of the RQ between the physician and the PSR.

##### **A) PSR'S VISIT FREQUENCY:**

All the PSMs and the physicians in this study reported that an appropriate visit frequency (i.e. at least fortnightly or if possible, weekly) by PSRs was very important to develop RQ with the physicians. In their explanations they stated that in Pakistan the number of the PSRs visiting physicians is extremely high due to the presence of large number of pharmaceutical firms. As already mentioned, on an average 50-60 PSRs visit a physician on the daily basis, therefore, it is very difficult for the physician to remember the PSRs and also their products' name. Furthermore, in such a competitive environment it is indispensable to keep in touch with the physicians in order to fulfil their needs and wants to develop RQ.

*The PSR's visits are required because there is a huge competition and 50-60 PSRs visit the physician in a day. If a PSR does not visit a physician, their selling skills and product knowledge cannot be applied. And if the PSR visits within the proper intervals, the physician will be familiar with the face of the PSR. But this does not mean to visit on a daily basis, this would make him or her annoyed [PSM-3].*

Similarly, the physicians confirmed the explanations presented above from the PSMs regarding PSR visits frequency. The following statement from the physician gives the impression that they were also very clear regarding the competition among the firms and their PSRs. And consequently, about the large number of brands under the same product category being promoting to them. Therefore, they needed regular visits from the PSRs in order to memorise and prescribe their brands.

*The regular visits are important because there are a huge number of companies and their PSRs. And everybody asks for prescription of their products. Well in all this, many companies are at the same level and their product prices are also similar. Therefore, those who visit will get prescribed because there must be a product reminder [GP-3].*

The above quote from the physician signifies that it is the PSR's job as the firm's representative to address all the physician's concerns regarding the products and

services offered in order to develop RQ (Crosby et al., 1990). By conforming to these obligations, the PSR fulfils the commitment on his own part with the physician. Otherwise, physician feels that the PSR is not performing their role and in such a competitive environment somebody else (i.e. the competitor) can fulfil the physician's needs. Such conduct of the PSR fosters the physician's negative perception about the PSR's non-serious attitude. Therefore, a quality relationship cannot be developed due to the lack of regular visits and fulfilment of physician's needs and wants. So, in order to meet the physician's expectations and the market's competitive situation, an appropriate number of visits (fortnightly or weekly) by PSRs to the physician are necessary to develop RQ, as illustrated here:

***Your commitment is not fulfilled until you give proper visits to the physician. If you do not, there will be a gap in your consistency that will naturally be filled by someone else. The competitors will become active and fill this gap and they will gain a winning situation due to this [PSM-2].***

The PSR fulfils his or her commitment by providing product-related information during visits to the physicians (Lagace et al., 1991). The PSR's visit also provides the opportunity for the physician to evaluate not only the quality of the information provided but also the conduct of the PSR's own role during these interactions. The greater the amount of information that the customer benefits from in frequent interactions, there is reduction in the customer's uncertainty and thus this leads to a high quality of relationship (Leuthesser, 1997). However, this is only possible if these interactions achieve the physician's positive value judgement about the information provided. That is how far it is helpful in the betterment of physician's professional orientation for the patients' benefit. The extent of the physician's expectation of the PSR's visits is stated by the PSM in the following quote.

***The physician is expecting that the PSR will provide some valuable information during the interaction that will add some value in clinical practice. And if so, it will increase the physician's level of trust in the PSR [PSM-5].***

The above quote signifies that the PSR's visits are not only important to meet the competitive environment but most importantly to fulfil physicians' technical needs (e.g. Hennig-Thurau & Klee, 1997). This is because the pharmaceutical industry is a highly dynamic in terms of new product innovations and advancements in the ways of treating diseases (e.g. Lagace et al., 1991). Therefore, physicians perceive the PSRs' visits to be very important for them because they consider PSRs a primary source of information (e.g. Wright & Lundstrom, 2004). As physicians are busy in their clinical practices, to keep themselves updated, they therefore seek out valuable information from the PSRs (Murshid & Mohaidin, 2017). Moreover, frequent interactions provide better opportunity for the PSR to provide information critical to the success of the relationship (Lagace et al., 1991). According to Doney and Cannon (1997), a salesperson's frequent interaction with a customer engenders customer trust in that salesperson. These interactions help physicians to acquire necessary information for their patients' wellbeing. And if the PSR's visits meet this physician's objective, it will not only help to develop the physician's trust but also create satisfaction with the PSR.

***The physicians do not have time to stay updated with all of the current information. And pharmaceutical industry is very dynamic and dosage schedules also change rapidly. If a physician gets feedback from the patient, this needs to be passed on to the PSR to add in against the feedback. Therefore, if the PSR visits the physician often you can discuss more and satisfy the physician's queries. Then in this way you can develop the physician's trust in you [PSM-3]?***

The quote above indicates that regular visits foster a cognitive form of trust between the physician and the PSR. They involve the physician in evaluations about the benefit he or she is receiving from the PSR's visits. If the benefits received are more than the time given to the PSR during interaction then this leads to the physician's trust and satisfaction with the PSR (e.g. Leuthesser, 1997). As, the PSR's visits fulfil the physician's self-interest in improvement in his or her professional orientation. Therefore, the physician grants respect and regard to such a PSR. This is because the physician develops a positive impression about the PSR's sincerity to his duty, as illustrated in the following quote from a PSM.

***The physician pays regard and respect to a PSR who visits the physician regularly. This is because physician thinks, the PSR is sincere to him or herself and also with the company. And it is quite possible that the physician does not want to give a share of prescription, but due to the PSR's regular visits he or she starts [PSM-4].***

Similar kinds of responses to those stated above were also given by physicians in general. Their explanations give the impression that regular visits affected the cognitive level evaluation of the PSR's honesty to his job (in fulfilling physician's self-interest) and trust and satisfaction development. And consequently, the physician offers his or her respect to the PSR:

***A PSR's regular visits show that the PSR is honest and fulfils his or duty. I respect such a PSR [GP-3].***

Moreover, their explanations give the impression that regular visits have an effect beyond the cognitive level evaluation and trust development. Even if a physician is not actively assessing the PSR's interactions and performance, regular visits also influence the physician psychologically. As one of the physicians stated, regular visits by a PSR give the feeling that the physician is someone special to the PSR. And in reaction the physician also gives special treatment to such a PSR, as illustrated in the following:

***Even if it is not proactive, trust develops as a reaction to a PSR's regular visits. There is psychological action involved in it [...]. This compels me to feel I am someone special to the PSR and he or she is giving me special treatment. Therefore, I will also give special treatment to the PSR. There is no doubt this is my reactive response, but I do this. Second, you also review the PSR's own and the performance of the product he or she is promoting. If the PSR is treating you in a good manner and performance of the product is also good then you will also treat him or her in a respected way, won't you [GP-1]?***

The above quote suggests that regular visits also engender the physician's emotional sentiments too regarding the PSR's efforts in developing RQ. Physicians tend to be very busy with their patients as a result the PSR's time with the physician is very limited (e.g. Wright & Lundstrom, 2004). In such a small time it is very hard for the physician to give a full attention to sales calls. Furthermore, many firms sell more or less the same generic brands under one product category and similar information is communicated by the PSRs. Therefore, often there is less time for the physician to cognitively evaluate the PSR's

performance on the basis of information shared. However, the regular presence of a PSR in the physician's consulting room gives him or her psychological reinforcement of the PSR's honesty, which fosters emotional mechanisms leading to affective trust, as illustrated by another physician:

***Definitely regular visits help to develop trust in the PSR, and because of these visits, emotional feelings for the PSR also develop. When the quality and standard of products is similar, preference will be given to the PSR who visits more. For instance, when one PSR visits once and the other ten times, then there is a huge difference between the two [GP-2].***

This quote shows that in addition to the physician developing trust due to the quality of the products being promoted by different PSRs (cognitive aspect), the regularity of a PSR's visits engender emotional feelings (or mechanisms) that lead to the physician's affective trust in the PSR. Consequently, the PSR is preferred by the physician in terms of getting a higher prescription share, if the product he or she promotes possesses the same level of product quality in comparison to its competitors. This also signifies that the quality of the product must be present (as examined above) along with regular visit frequency. Apart from the above explanations, one of the physicians expressed the importance of a PSR's visits in terms of fulfilment of social needs:

***If the PSR does not provide any new information, then visits do not matter. However, you spend the time in some interesting conversation with the PSR. And secondly, frequent interactions always affect you and then, as a gesture of goodwill, you start giving prescription share to the PSR, because he or she comes consistently and provides me services. Therefore, I have to look after him or her [GP-1].***

The above statement also provides the impression that although the physician expects value addition in terms of his product related technical needs, the PSR's visits are also very important for the physician's social needs fulfilment. This includes the physician spending time with the PSR if possible, (i.e. in less busy times). Doney and Cannon (1997) suggest visits to a customer provide a salesperson's social settings opportunities, in which a more productive information flow can be exchanged. As a result a customer not only acquires technical information but also shares the personal information with the salesperson (e.g. Crosby et al., 1990). Several interactions of this sort help in the development of RQ. The physician is likely to give privileged to such interactions or PSR visits, in the shape of prescription share. Moreover, such acts by the physician also give the impression that the PSR's visit frequency fosters his commitment to the PSR, as illustrated in the following quote.

***The biggest resource is time investment, although others are also important. But in this case the PSR goes to the physician, which is valuable for the physician. It gives the physician the idea that the PSR has invested his time on the physician. Therefore, the physician definitely realizes and memorizes it and then converts it into prescriptions share [PSM-1].***

This signifies that the physician considers the PSR's visits valuable because the PSR invests his time (in travelling, in waiting and in communication) to do so. Therefore, the development of such sentiments or emotional mechanisms also engenders or triggers the physician's positive perception of the PSR's benevolence or generosity. This leads to

physician's affective commitment to the PSR. The next section will examine the role of the PSR's appearance in the development of RQ between the PSR and the physician.

## **B) PSR'S APPEARANCE:**

The data category PSR's appearance emerged outside of the initial conceptual framework from the responses of both the PSMs and the physicians. All the PSMs suggested that the PSR's appearance was a part of his or her overall personality and a necessary factor to developing RQ between the PSR and the physician. This is illustrated in the following quote, which is representative of many similar responses from PSMs.

*It is very important to be well dressed because the PSR is going to see a very highly educated class of society [PSM-3].*

In Pakistani society physicians are considered to belong to a highly educated professional community. Therefore, the PSR's appearance should be such that it can aid the physician's assessment of a similarity with the PSR as a professional. Smith (1998b) also found similar results in her study, suggesting that customers are less likely to develop relationships with sellers if their attitudes, such as professionalism and work ethics, are not mutually held. Similarly, the PSMs considered appropriate dress code (i.e. formal business attire, which includes trousers, shirt, tie and/or full suit) for the PSR's important to improve the PSR's appearance in totality. An inappropriate dress code could cause a delay in the development of quality relationships with the physician, as illustrated in the following quote.

*Usually the PSRs go to see physicians in a 'rough and tough' style, this creates delay in your customer relationships. Therefore, as much as your getup is appropriate and professional, the earlier you will win your customer [PSM-2].*

The above quote illustrates the PSM's concern regarding the PSRs' inappropriate or informal ('rough and tough') dress code practices generally in Pakistan. Normally the PSRs visit the physician alone without any management control over their field work (Lagace et al., 1991). This can make the PSRs a somewhat relaxed and they take their dress code for granted. As, a result such PSRs can be perceived as non-professionals by the physician and thus this leads to delay in the formation of relationships. The physicians also provided the same responses on appearance and discussed what a PSR should look like:

*I think the PSR is an educated person, so his appearance [...] should be like an educated person. So, from clothes or dress it should reflect that he or she is a PSR but not the patient, because the PSR also waits with the patients. Therefore, he or she needs to look like a pharmaceutical person [GP-3].*

The physician's quote above also confirmed the PSMs' assertions that the PSR's appearance serves as non-verbal communication of his professional attitude towards the job role. In addition to this, the PSMs also provided explanations of the aesthetic effects of the PSR's dress on physicians. Appropriate dress code (i.e. formal business attire, which includes trousers, shirt, tie and/or full suit) can create a pleasing first impression on the physician, as illustrated in the following:

***A good look always impacts others. And your personality or dress would be your first impression while entering in a doctor's chamber. If your first impression is nonsense, that makes him or her irritated. Then what will the doctor discuss with you [PSM-2]?***

Therefore, an appropriate dress code (i.e. formal business attire, which includes trousers, shirt, tie and/or full suit) for a PSR's is also necessary to build a physician's positive image perception. It helps in removing the physician's uncertainty due to the development of positive expectations regarding the PSR's future performance (e.g. Ahearne et al., 1990). Even if it is subconscious, appropriate appearance (i.e. a PSR in formal business dress code) gives the physician psychological corroboration for the PSR's positive behaviour. Similarly, Kim et al. (2009) as a result of their study, found that professional looking sales associates influence the consumer's positive emotions not only for their selves but also the image of stores they represent. Therefore, if the physician is uncertain about the PSR based on non-professional appearance (i.e. an informal dress code), it could possibly lead to an unresponsive physician. And that certainly leads to inertia in the development of the relationship with the PSR or even no relationship development activity at all, as stated below.

***A doctor who sees 50-60 PSRs in a day can easily scan the PSR and develops image perception about the PSR's capabilities. Definitely, when a well-dressed PSR enters the chamber, doctor will perceive him or her as knowledgeable and skilled and then talk at the level of the PSR. On the other hand, a negative impact will be developed when a PSR enters in inappropriate attire, therefore a physician will avoid talking with him or her [PSM-5].***

The importance of the statement above is that the physical attractiveness of the PSR's formal business attire gives physician an emotional reassurance that plays an important role in the improvement of future relationships. The physician develops a positive value judgment about the PSR's professional appearance and starts making assumptions about the knowledge and skills he or she possesses. This positive evaluation then leads to the development of physician's initial trust in the PSR (e.g Ahearne et al., 1990). The following quote demonstrates the link between appearance in terms of dress code with the development of trust and satisfaction.

***Your dress will leave a pleasant impression on the doctor. And if your impression on the doctor is good then all the other factors will also be developed with the passage of time i.e. trust and satisfaction [PSM-2].***

The formation of this initial trust then enables the physician to have open communication with the PSR in terms of his or her concerns regarding products or services. Consequently, the PSR will address the physician's concerns more appropriately; that is necessary to develop further trust, satisfaction and hence RQ (Boles et al., 2000). A physician who feels more comfortable in discussing issues will likely want to establish RQ with the PSR, as stated in the following:

***The good dress of the PSR impacts very much. Because we wear a little bit casual because we want to be relaxed during our practice in the clinic. I often discuss with the PSR, as a bit of fun, about his shirt colour and about the knot in the tie he is wearing. If the PSR looks fresh and better than the patients, the doctor feels comfortable [GP-2].***

Given the contextual situation, the PSR's appearance is important in developing an initial trust level; this emerges from the physician's cognitive assessment of the PSR's similar professional attitude. This then enables the physician to communicate product(s) and/or service(s) related technical needs openly with the PSR. Otherwise, an inappropriate PSR's dress code will not allow him or her to develop relationships because of the physician's uncertainty and lack of trust in the PSR's future conduct. Although results suggest that appearance facilitates the physician's initial trust in the PSR as an initial non-verbal communication form, the development of RQ also depends on the other conducts of the PSR during interactions with the physician. Therefore, the next section examines the role of the PSR's verbal-communication in the development of RQ between the PSR and the physician.

### **C) PSR'S COMMUNICATION:**

The data category PSR's communication also emerged outside of the initial conceptual framework from the responses of both the PSMs and the physicians. All the PSMs noted that the PSR's communication was a part of an overall effective information exchange and important to developing RQ between the PSR and the physician. In their explanations they pointed out again that it is necessary because the PSR interacts with a highly educated professional class:

*In other factors PSR's communication is very important. There is no doubt about it that the PSR is going to interact with very highly professional persons that are considered from the finest class of our society [PSM-1].*

The above quote from the PSM indicates that physicians occupy an elevated position in the social order, where it is believed that physicians are more educated than those below, including the patients. Therefore, the mode of the communication by the PSR should be one that can help in maintaining this notion of the physician's social status. In their explanations the PSMs expressed their view that although it is not the native language, if the PSR communicates in English, this will have more of an effect in the development of the RQ between them.

*If you use English language words at the right place- this is an important factor in development of good relationships. In fact, the community you deal with observes the calibre of the people you interact with. And in reality, this not the doctor's own requirement but it is about his or her internal satisfaction in that the way PSR communicates in front of the patient should be on the level above that of the patient [PSM-2].*

In Pakistan it is believed that more educated people communicate in the English language. Due to a lower education level in general, the majority of the population including the patients communicates in the local native languages. Because PSRs normally make their sales call to the physician in the patients' presence, in order to sustain or maintain a high status perception of the physician, it is advantageous for the PSRs to communicate their messages using English. Apart from the internal or psychological level of need satisfaction, an appropriate use of communication also fulfils the physician's professional needs. This implies that development of relationships depends not only on the quality of the exchanged information but also how it was exchanged (e.g. Parsons, 2002) Thus, it is

imperative to communicate with the physicians not only in English language but also in their own professional medical terminologies.

***I am referring to communication in terms of how successful the PSR is in delivering a message effectively. That is, are the words he or she is using appropriate or not? Are the words true medical language? Therefore, you have to communicate at the level of the customer (or physician) [PSM-5].***

The above statement from the PSM is linked with the impression above (i.e. concerning PSR's appearance) that a PSR's communication should fulfil the physician's assessment of similarity with the PSR as a professional. This is again similar to assertions made by Smith (1998b) who found as a result of her research that buyers are more likely to develop relationships with sellers when they share similar attitudes, such as professionalism and work ethics. Therefore, physicians take more interest in the interaction when the PSR exchanges information in professional medical language. Otherwise, the PSR will be perceived as a less credible source of information (e.g. Lagace et al., 1991), which leads to the physician being unresponsive in the information exchange. And that certainly will lead to disinterest in the development of the relationship with the PSR or even no relationship. Physicians gave similar response in terms of professional conduct in communication with a PSR, stating it is important in order to establish friendly relations with physicians, as reflected in the following quote.

***I really dislike the PSRs who just ask for favours with their heads down looking at their prescriptions ... I really hate them. I really like those who communicate with me in an honourable and professional way [GP-2].***

The use of the word 'hate' in the above statement signifies that this physician really has an aversion to a non-professional attitude by the PSRs in terms of the information exchange during the sales call. Such an attitude came to the fore due to the PSR's lack of product knowledge. On many occasions, when the PSRs have an opportunity to discuss their products' features and benefits with the physician in more detail, they failed to do so because of their limited product knowledge (examined in the next section). However, the pressure of achieving sales quotas led to the PSRs asking for favours and this leads to the physician's uncertainty, as stated in the following quotes.

***You can better communicate when you have good product knowledge. Because then you will have the appropriate set of words. And this is very important to achieve physician's trust and satisfaction [PSM-2].***

***When a PSR has a good grip on product, disease and competition knowledge, he or she will communicate with more confidence. Otherwise, in the case of hesitance during communication, this will foster the physician's perception that the PSR does not have any knowledge [PSM-5].***

As for better professional communication, the PSR needs the appropriate language or words, and that is only possible if the PSR has the necessary product, disease and competition knowledge as well. This is recently confirmed by Balaji et al. (2017) that the language divergence leads to the reduction in customer's trust in, satisfaction with, and commitment to service provider. Therefore, a PSR who communicates more in the language that appeals to the physician's professional orientation leads to the physician's trust in, satisfaction with, and commitment to the PSR (Clark et al., 2011). This is because

the PSR fulfils the physician's technical needs more confidently and without exhibiting any hesitations while communicating valuable information.

Although, there is need to be more professional or formal, however, it is equally important to use greetings while communicating with the physician in order to gain the physician's trust and satisfaction, and thus RQ, as stated in the following quote.

***The greetings and rapport building are also very important in the development of the physician's trust. They provide an impression that the PSR is not always about to make a sales call. And it gives the physician a sense of appreciation of the PSR's interest in relationship formation [PSM-1].***

This is because communication of the greeting words engenders the physician's feelings that the PSR not only exhibits a sales orientation but also gives a sense of the PSR's customer (or physician) orientation. This leads to the PSR's creating an impression of caring or benevolent intentions for the physician; that is important in order to gain the physician's trust and satisfaction (e.g. Moorman et al., 1992). Similar responses about the PSR's communication variants during the interaction were also given by the physicians, as illustrated in the following:

***I will say the PSR communication should not only be focused on product related discussion, but should also be bit relaxed. That is, the presentation shouldn't be very tight or rigid but it should also be flexible, with some humour in it. I mean to say that it does not sound well if the PSR just talks around the product literature or whatever he or she memorized about it [GP-1].***

The above quote indicates that the physicians knew that the purpose of the PSR's visit is to provide information. However, the busy routine of their clinical practices demands a bit of pause for relaxation. Therefore, the PSR should be flexible enough to judge and behave according to the situation to fulfil the physician's particular need at a particular time. As already discussed, in order to develop RQ both the physician's technical and the social needs must be fulfilled (e.g. Hennig-Thurau & Klee, 1997). Therefore, if the PSR behaves inflexibly by just focusing on communicating product related information, it may cause psychological frustration then evident in the physician's behaviour. On the contrary, if the PSR adds some greetings to the communication it gives some psychological relief to the physician that engenders emotional feelings; that leads to the affective trust in and also satisfaction with the PSR, which is also the emotional state of the physician during interaction.

Similar to PSR appearance, communication is also required in order to gain a physician's trust and satisfaction, as it also shows the PSR's similarity to the physician. When the PSR uses an appropriate mode of language, for instance English and medical language that also provides psychological reassurance to the physician that his or her social class is recognised. Furthermore, it also gives the impression to physician that the PSR is a credible source of information. However, it is also explained by respondents that the PSR can only communicate an appropriate use of medical terminologies if he or she has a good breadth of product knowledge. Therefore, the next section examines the role of product knowledge in the development of PSR-physician RQ.

#### **D) PSR'S PRODUCT KNOWLEDGE OR EXPERTISE:**

All the interviewees in this study stated that the PSR's product knowledge was a part of overall effective information exchange, and was important to developing RQ between the PSR and the physician. The physicians reported that although it was a baseline, they had concerns about the lack of product knowledge among a majority of the PSRs in Pakistan.

*The PSR should have complete knowledge of the product, as this is the baseline. But unfortunately, here we do not have this. 90% of PSRs act like a hawker who just tells the customer that I am offering you a potato and it cost 10RS per KG etc. So, they just knew that they are selling the potatoes but they do not know about what nutritional value it has [...]. This is because of the flood in terms of low standard companies in Pakistan [...]. Unfortunately, the PSRs from these companies do not arrive with training. They only care about their sales, no matter what ways they can achieve it [GP-2].*

This signifies that most of the PSRs provide minimal information about the product rather than offering detailed accounts. This gives the physician the perception that the PSR is not a product expert as the salesperson who exhibits relevant knowledge of their product or service is considered competent by customers (e.g. Crosby et al., 1990). However, the physician linked his impression with the problem of the increasing number of low standard national firms registering in Pakistan that not care much about PSRs' training. Therefore, they do not have product knowledge and leave themselves asking for favours in terms of prescriptions (also examined in above). However, the PSR's product knowledge is crucial for physicians as their busy clinical practice schedule leave little time for them to consult with other sources of information (Murshid & Mohaidin, 2017). Therefore, they consider knowledgeable PSRs as a primary source of information and seek knowledge transfer from PSRs to keep them updated, as illustrated in the following:

*Doctors do not have time to keep themselves updated with the product and disease related current information. The people from the pharmaceuticals are there to inform them [PSM-4].*

Similar to the above explanation the physicians also said that they not only sought current, updated information as a result of the ongoing research, but also wanted to be able to ask about any aspect of the product. For instance, a product's usage, side effects, contra-indications, to refresh their knowledge. A PSR's product knowledge is very helpful in this regard, as illustrated below:

*They should provide new information. Because there is a flood of new research and companies are launching new products. Or, there might be the new indications for their already existing product(s) and/or the side effects they found, which mean they withdraw that particular product as a result of the research. So, the PSRs are very helpful in providing such valuable information [GP-3].*

The above quotes from both the PSM and physician suggest a similar assertion to that made by Lagace et al. (1991), that the main reason for the physician to meet up with the PSR is to make informed prescription decision making. Therefore, high quality information is required in order to address any of the concerns regarding the product that a physician raises during their interaction with the PSR. This quality information can only be delivered when the PSR has knowledge of the product and the related disease or ailment for which that product can be prescribed. This is illustrated in the following quote from a physician:

***Definitely, the PSR's product knowledge is very important and that is why I meet and give my time to him or her. The relationship will be built when the PSR is capable of improving my professional orientation [...]. Therefore, if the PSR does not have good product knowledge I will keep my relationship very limited in terms of chats. Because, if he or she doesn't help me to treat my patients better, I do not have any benefit in keeping such relationships [GP-1].***

This physician's observations suggest that the PSR's product knowledge is linked with the physician's professional orientation enhancement. Palmatier et al. (2006) found similar results in their study that when customers received increased value from information from the salesperson, they invest more efforts to strengthen their relationships with him or her. Similarly, physicians see the PSR as an expert who is responsible to help in the improvement of their clinical practice technical needs. And, if the PSR successfully provides the required information to the physician it will lead to RQ between them. Similar assertions were also made by the others in the literature, who found that the PSR's expert knowledge of a product leads to RQ with physicians (e.g. Clark et al., 2011; Lagace et al., 1991). This is because valuable information given fulfils the physician's self-interest in providing quality and secure care for the patient. Therefore, the PSR who does not have good product knowledge cannot ensure the self-interest in the physician, which consequently leads to a lack of relationship development. This is because such PSR will be perceived as an incompetent source of information by physicians. Since salesperson's level of products/or services and selling knowledge perceived by a customer create a customer's trust and satisfaction (e.g Parsons, 2002; Wong & Sohal, 2002). Similarly, the PSR's product knowledge is vital in order to gain physician's trust and satisfaction with him or her. As, PSRs who possess a breadth of product knowledge will communicate it with more confidence, self respect and ego, as illustrated in the following quote from the physician.

***Product knowledge is very important for the development of trust and satisfaction with the PSR. Because a knowledgeable PSR will come with an ego and self-respect [GP-2].***

A physician's impression of the PSR's product knowledge and the way he or she interacts means that the knowledgeable PSR tries to convince the physician to give a prescription based on the product's benefits to the patients. In this way the presentation by the PSR not only meets the physician's own technical need requirements but also transfers to the patient's benefit. Therefore, this sort of knowledge, transferred to the physicians gives them a confidence in the PSR that thus helps him or her to gain the physician's initial trust, not only in the product but also in the PSR. This helps in removing the physician's uncertainty regarding the benefits of the product for the patient.

However, the initial trust then shifts on to intense levels after a comparative analysis of the information given by the PSR and the patient's response. That is when the physician finds satisfactory results in terms of the improvement in a patient's condition- the trust in the PSR moves onto stronger levels; or it may distort if the physician does not observe any improvement in the patient (e.g. Lagace et al., 1991). This tendency was also reported by the PSM:

*If the physician finds the results as per the given information from the PSR, he or she will develop more confidence in the PSR, which will also lead to the physician's satisfaction with the PSR. Consequently, the physician will develop a relationship with such a PSR and will extend the benefits to his or her patients. This leads to a higher prescription share for the PSR [PSM-1].*

Thus, positive feedback from patients not only helps in the development of the physician's cognitive trust in the PSR, it also leads to satisfaction and the physician's calculative commitment to the PSR in terms of the higher prescription share. This is due to the fulfilment of the physician's self-interest (i.e. in terms of the technical or professional needs) in assuring the patient's wellbeing. Since customer trust in the salesperson is developed on the basis of customer's evaluation of promised versus delivered performances (Wray et al., 1994).

Thus, The PSRs who fulfil both the physician's self-interest and the patients' wellbeing will achieve his or her trust, satisfaction and commitment, which is necessary in order to develop RQ. The next section examines the role of the PSR's flexible responses to varied situations in the development of RQ between the PSR and the physician.

#### **E) PSR'S FLEXIBLE RESPONSES TO VARIED SITUATIONS:**

The data category PSR's flexible responses to varied situations emerged outside of the initial conceptual framework from the responses of both the PSMs and the physicians. All the interviewees in this study reported that the PSRs needed to be flexible in their responses during interactions with physicians. This was seen as crucial to developing RQ between the PSR and the physician. This is because, physicians normally have a busy schedule in dealing with patients and PSRs. There is no appointment system for the PSR to see the physician as a rule and they normally see the PSRs while having a short break from patients. This sometimes leaves very little time for the physician to deal with the PSRs. Therefore, the PSR's flexibility in handling such a brief interactions with the physician is very important.

*Situation handling is very important - if the physician is busy and allows the PSR to detail the product within 5 minutes.... and the PSR is careless about this in his detailing then their relationship might never develop. The physician will be annoyed with such behaviour by the PSR. Conversely, the PSR who acts according to the situation ... will achieve benefits in terms of relationship development. It will give the physician a feeling that the PSR is sensible; otherwise, he or she will feel there is no benefit in developing the relationships with such non-sense PSR [PSM-5].*

The significance of this is that the PSR should act according to the physician's situation in terms of his product detailing during the sales call and also in terms of overall visit frequency, allocated days and timings. Non-compliance with a physician's wishes can cause anger or frustration that thus creates a barrier in the development of RQ, as illustrated in the following quote by one physician (please also see appendix 8, Q-11):

*Well, some PSRs start irrelevant kinds of conversations. I don't know what they have in their minds but they start discussing unrelated things, e.g. they ask about my clothing and then come back to discussing the product. Often my schedule is very tight... I have to see huge numbers of patients and also take sales calls of a large number of PSRs. So these irrelevant kinds of discussion mentally irritate me, although I listen in courtesy. I even do not like over detailing of a product by PSRs [GP-3].*

This suggests that the PSR's flexible behaviour is important for the development of RQ in terms of handling the situation while interacting with the physician. Physicians relate this to their business of dealing with patients, which can be complicated if PSRs visit at awkward times or indulge in irrelevant kinds of discussion during their sales call. The most important entity in a physician's chamber is the patient and physicians keep more favourable attitude for patients (e.g. Khatri et al., 2017; Lundin, 2000). This is because they want to see a maximum number of the patients to address their health concerns. Therefore, if a PSR shows his cooperation with the physician's priority of dealing with the maximum number of the patients without any extra pressure, then it leads to the physician's trust in and satisfaction with the PSR. Similarly Crosby et al. (1990) identified that salesperson's relational selling behaviour such as cooperation along with his or her personal characteristics are important in influencing customer's trust and satisfaction. Conversely, a physician can develop the impression that the PSRs is more sales oriented rather than customer oriented. That is to say, the PSR is protecting his or her own self-interest in either job requirements by undertaking sales calls or trying to develop relationships by praising physician's clothing rather than realizing that the physician's self-interest is to deal with patients. This thus also leads to the physician's frustration, which deteriorates the physician's trust and satisfaction development and hence RQ. However, this cooperation can also work conversely; for example, when the physician wants to spend time with the PSR, as illustrated in the following quote from a PSM, which is illustrative (please see appendix 8, Q-12):

***When the physician has only a little time the PSR should show awareness by only taking a little time. Now, if the physician has a little time, you honour him or her by listening and sitting. So both of these factors are important, in order to show your sincerity for the development of physician's trust [PSM-2].***

This signifies that the PSR should judge the situation and act accordingly while interacting with the physician. Khatri et al. (2017) in their study found that for employees work in healthcare context, flexibility to adapt to changing situations has chief importance. This impression is also similar to the literature on adaptive selling, which suggests that the salesperson should alter their sales calls during interaction with customers and behave according to the situation by perceiving its nature (e.g. Spiro & Weitz, 1990). Therefore, the PSR should be careful in fulfilling the physician's specific needs at the specific time, as explained above. This kind of PSR's flexible responses in varied situations reassures the physician about the PSR's sincerity, care, and the benevolent intentions towards the physician. It shows the PSR not only cares about the physician's social needs by spending time, but is also focused on the physician's professional self-interest in dealing with the maximum number of patients by avoiding unnecessary time communicating the product's detail if not required. When a physician gains this impression of the PSR it leads to his or her affective trust in and satisfaction with the PSR. The literature on trust also suggests that affective trust is based on emotions that arise from customer's perceived personal experience with the salesperson's care and obligations (e.g. Johnson & Grayson, 2005; McAllister, 1995). Similar explanations were also provided by physicians:

***Definitely, if the PSR acts according to the situation it will lead to my trust in and satisfaction with the PSR. And I will feel that the PSR is caring for me [GP-3].***

This is a quite clear response by a physician that the flexible behaviour adapted by a PSR to handle varied situations shows his or her care in dealing with physician. Creating such an impression in the physician fosters both affective trust and satisfaction with the PSR, which leads to RQ due to the activation of emotional mechanisms favourable to the PSR.

Although the PSR's flexible responses to varied situations is necessary, the development of RQ is also dependent on other aspects of the PSR's conduct during their interactions with the physician. Therefore, the next section examines the role of the PSR's ethical selling behaviour in the development of RQ between PSRs and physicians.

#### **F) PSR'S ETHICAL SELLING BEHAVIOUR:**

All the interviewees in this study accepted that the PSR's ethical selling behaviour was a part of the overall effective information exchange. Ethical selling was seen as crucial to developing RQ between the PSR and the physician. PSM-1 provided his account of the importance of a PSR's ethical selling behaviour towards the physician and also its contribution to the development of trust:

***The PSR should not only openly describe the product's benefits but also its demerits or side effects. [...]. Therefore, if the PSR reveals any drug interaction or side effect on his own to the physician, it helps to gain the physician's trust because he or she will then feel good about the PSR's neutral intentions. And conversely, if the physician finds about this from any other source then his trust in the PSR will be altered. This is because the physician is concerned about the patients as he or she is earning from the patients and if not sincere with them, then definitely will suffer in terms of loss of patients as clients [PSM-1].***

The significance of the above assertion is that the PSR should be honest when communicating product benefits in conjunction with its side effects. If the PSR avoids mentioning any of the product's side effects in order to maximize prescription share, it can lead to serious consequences for the patient. It has been already examined above that the patient is the chief priority for the physician, both as a professional and also as a human. The latter deals with the physician's emotional sentiments to alleviate the patient's misery. And the former is associated with the physician's role as a healthcare provider, as well as a seller of professional services to the patient as a client. So, the patient's health outcomes are crucial for the physician in all these respects. Not only on a humanitarian and professional basis but also to ensure his self-interest in terms of economic gains. In the context of Pakistan, patients not only pay for health advice but also provide free word-of-mouth recommendation to their friends and family, when they feel satisfied with a physician. Therefore, if the PSR intentionally hides any of the product's side effects that the physician finds later, this can cause conflict. The physician will likely develop a perception that the PSR is dishonest and lose his trust in the PSR. Furthermore, the physician will perceive that the PSR is protecting his or her own self-interest to maximize prescription share rather than to protecting the physician's self-interest in patient's wellbeing and his own earnings. Conversely, if the PSR tells the truth regarding

the product, he or she will gain the physician's trust. Sanchez-Franco and Rondan-Cataluna (2010) in their study also found that salespersons, who valued customer's interests and welfare more as compared to their own are highly likely to gain a customer's trust. PSM-3 offered similar views on the PSRs' ethical selling behaviour by giving the example when a physician is not prescribing the product according to the given guidelines by the PSR as illustrated in the following quote:

***For example, if the physician is prescribing a PSR's product where it is contra-indicated or in the wrong age group. No doubt in guiding him or her about this, the PSR will lose prescription share [...]; however, when he or she lets the physician know about this and guides him or her about the right usage then such acts give the physician a feeling about the PSR's integrity in caring for the patients' wellbeing. And this helps the PSR in the formation of a relationship with the physician [PSM-3].***

It is the PSR's responsibility to guide the physician about the proper use of the product, in particular disease indication or the delivery of the right dosage to achieve maximum health benefits for patients. Since the physician's ultimate goal is to provide the best healthcare advice to the patients, therefore a PSR's ethical behaviour shows his or her integrity in achieving the physician's goal. And such cooperation or customer-orientation and willingness to accept prescription loss then provokes the physician's positive sentiment for the PSR's care about the patient's wellbeing. Thus, the physician develops affective trust in the PSR. This is because the PSR who exhibits more customer-orientation rather than sales-orientation will likely to gain customer's trust (e.g. Bejou et al., 1998; Dorsch et al., 1998).

Similar to the above explanations from the PSMs, the physicians also confirmed that the PSR's ethical sales behaviour has a crucial role in the physicians' prescription decision making:

***I myself request the PSRs to tell me about any side effects. That is, shall I prescribe their product in pregnancy or to lactating mothers? That is because there might be adverse reactions of a product on many occasions, therefore the physician should be ready to handle any reaction that occurs [GP-3].***

This signifies the importance of PSR's ethical selling behaviour for the physician in order to ensure his self-interest in the patient's healthcare and wellbeing. As a result, the physician will avoid prescribing the product to a particular patient or be ready for any adverse drug reaction if the drug needs to be administered. However, the above statement does not provide any idea of the physician's self-interest in terms of economic gains through satisfying their patients by achieving their safe recovery from a disease or ailment. It is likely that the patient will be highly satisfied, if the physician cures the patient early and safely as patients' trust a physician who gives their patients' welfare the highest priority (Ehsan & Ashill, 2014). Therefore, there is less chance of the patient switching to another physician and both patient's retention and positive word-of-mouth would be ensured. As a result, the physician will automatically gain economic rewards. Consequently, it leads to a quality relationships between the PSR and the physician. The physician develops his trust when the PSR openly communicates the demerits of the product along with its benefits, as illustrated in the following:

***If the PSR properly tells me his or her product's merits and demerits, then I can trust in such a PSR [GP-1].***

On the contrary, in the case of any unwanted adverse event, a physician will discover a drug's demerits anyway, which leads to distrust and ultimately no relationship can be developed between the physician and the PSR, as explained by another physician:

***Physicians themselves find the bad points of product. And if a PSR hides them from me, I lose my trust and I put the break on everything at once [GP-2].***

Besides the above explanation, the PSMs also mentioned that PSRs should avoid making negative comments about competitors and their products as an ethical selling behaviour, as illustrated in the following quote.

***The ethics that the PSR should perform are.....they should be honest and not to tell a lie.... that is they should not exaggerate stories about their product and avoid discussing things about competitors that do not exist. Because, if the PSR claims anything about a competitor and physician afterward finds this is not true, ....this will yield very damaging consequences for the PSR [PSM-5].***

Therefore, PSRs should not exaggerate the benefits of their product and avoid criticising competitor's products in order to maximize prescription share. Making false claims against the competitors' products or exaggerating his or her own product will lead to the physician's distrust when he or she finds the opposite to whatever was claimed by the PSR. Similar explanations were also provided by the physicians:

***The means to get prescriptions are to discuss the quality of the product rather than the PSR discussing other products. So, the PSR should discuss the quality and efficacy of his or her own product and this is the way [GP-3].***

The above quote accords with the explanation provided by PSM-5 above, where the physician perhaps is expressing his feelings about the prescription decision making role he holds. That is to say the physician is a better judge in deciding the correct product for the patient. And when the PSR highlights the negative points of a competitor, it almost gives the physician an impression that the PSR is forcing him to choose his or her product. Consequently, this again leads to the physician's impression of PSR's sales orientation as being beyond the ethics of drug promotion. And according to the PSMs, the physician perceives such an attitude negatively rather than positively and dislikes the PSR. Thus, this creates a barrier in the development of trust, satisfaction and hence a quality relationship between the physician and the PSR.

Last but not the least, in the context of Pakistan another aspect of ethical selling is also crucial for the development of RQ. It is important that the PSR does not promise any personalized or generalized services (examined in the next section) that the firm cannot provide. Not only the physicians, but all the PSMs, reported that the PSR should take into account the firm's code of ethics regarding services (i.e. gifts, medical equipment and others) that the firm can provide. Moreover, if the PSR commits to something on the physician's behalf that is not listed in the firm's codes of ethics, and cannot fulfil his or her commitment, this can damage RQ:

***The PSR should know about his or her boundaries and code of ethics and then must stay within those. If the PSR makes a commitment to something which does not fall within the code of ethics then how he***

*or she will fulfil that commitment? And when the PSR does not fulfil that, the physician's trust and satisfaction will drop [PSM-3].*

The notion here is that the PSR should fulfil the promises he or she makes to the physician regarding services. The reason PSMs view this aspect as being important may be that in Pakistan there is a trend to offer personalized services (i.e. academic scholarships, clinical equipment, family dinners and so on) and sometimes physicians themselves demand services that are not general. The PSRs sometimes make promises to deliver these services due to sales pressure and to maintain a relationship with the physician without taking into account the firm's policy. Consequently, the PSR would not be able to fulfil this promise or commitment, leading to the physician's distrust, dissatisfaction and ultimately unwanted termination of the relationship with the PSR. This is because a physician will gauge such incidents as unethical behaviour and develop the impression that the PSR is not a trustworthy person. This gives the impression to the physician that the PSR has made a false commitment in order to boost prescription share. A similar assertion was made by Wray et al. (1994) that the salesperson's unethical behaviour and short-term goals orientation could subsequently endanger the possibility of developing long-term relationships with customers. Therefore, if the physician demands something that is not included in the firm's policy, PSR should make this clear in order to secure the physician's trust, satisfaction and valuable relationship. The next section examines the role of the PSR's relationship investments in the development of the RQ between the PSR and the physician.

#### **G) PSR'S RELATIONSHIP INVESTMENTS:**

The data category PSR's relationship investments refers to the different services offered by the PSRs to physicians. All the PSMs stated that these investments were very important in order to develop and maintain high-quality relationships with the physicians:

*Once the relationships are developed we have to renew them so that the relationships can last longer-term. To say 'renew', we have to do the little supporting promotional activities such as Continuing Medical Education events (CMEs) or something like that to bind the physician with us [...]. Therefore, you have to think of any innovative activity that helps you to have proper time with the physician [PSM-5].*

This signifies the vital role of relationship investment or services in the development and maintenance of an enduring relationship, which is similar to the literature on RQ (e.g. Keating et al., 2003; Smith, 1998b) which suggests that these investments exhibit the sellers' commitment to their buyers. The PSM here again pointed out the competitive environment of Pakistani pharmaceuticals, where the physician cannot afford to provide much time to the PSR during routine sales calls, but where the PSR is responsible for the management of their relationships with physicians (e.g. Scharitzer & Kollarits, 2000). Therefore, services can be used as an early effort to develop a quality relationship and later on in its maintenance. Some of these services are more helpful in the development of strong relationship bonds (or commitment) between the physician and the PSR than others.

Therefore, according to the respondents, the data category relationship investment can be divided further in two sub-categories, i.e. generalized services and personalized services. Generalized services were identified as services like product samples, gifts or give away(s) and CMEs etc. However the sub-category personalized services was identified as non-routine services. These are the services demanded by the physicians or offered by the PSR to a specific physician in order to maintain their relationship quality. The following sections examine the role of these different sorts of service in the development of RQ between the physician and the PSR.

### **G1 GENERALIZED SERVICES:**

All the PSMs reported that although generalized services are an important and integral part of a drug promotion strategy, they are not sufficient to develop and maintain RQ between the physician and the PSR in the context of Pakistan. The following illustrates PSMs' views on CMEs:

*In the current scenario services like CMEs do not have much role to play. Before, physicians liked to come on CMEs to learn but nowadays they have become very busy. Secondly, there is a saturation of these services as almost every firm is offering them. Although these are integral part of our promotional activities I don't think these services play any role in the development of quality relationships. However, a new topic may add some value to it [PSM-5].*

The above quote from the PSM provides the impression that services like CMEs are important; however, physicians take such services for granted as every second firm provides similar services. The majority of firms are effectively promoting the same products with different brand names under a particular disease area; therefore, these CMEs provide symmetric information, thus leaving less impact on the physician. Therefore, the physicians consider these as the fundamental obligations that the pharmaceutical firms and their PSRs have to provide. Furthermore, physicians' busy schedules do not allow them to attend such CMEs very frequently and this is why they seek much more product related information from the PSRs during their in-chamber interaction. Another reason physicians do not value CMEs is that they are normally carried out with a group of physicians, where a senior physician gives a lecture on the particular disease area and methods of treatment. Although it is one of the sources of information exchange that fulfils the physician's technical needs, because it is done in a group physicians do not take it as a service personalized to him or her. This is illustrated in the following:

*If you invite a physician for a CME in a group he or she will come, because of your relationship. However, this will not produce the feelings in the physician that you are doing this only for him or her [PSM-1].*

Similar to the above explanation, all the PSMs explained that physicians consider product samples as a service for the patients. Moreover, almost all the PSRs provide their product samples to the physician, so this also does not have much effect when compared to gifts. Gifts with the product's name on it are also very commonly given to physicians. Although this sort of gifting is a common promotional strategy, according to the PSMs physicians

consider gifts as a personal obligation for them from the PSR. They therefore contribute much more in the development of quality relationships, as illustrated in the following:

***Samples have an effect, but not much in the development of relationships. However, physicians somehow take and feel gifting as a personalized investment in them that leads to relationships [PSM-1].***

However, according to PSMs the delivery of product samples is very important early on in order to develop physician's trust, satisfaction and commitment. A similar response was also provided by physicians:

***Services and samples definitely help, but only if there is positive feedback from the patient. Therefore, if feedback on samples is good enough then it helps in the development of trust and satisfaction both in the product and the PSR [GP-1].***

The meanings of the physician in the above illustration reflects the view that services positively affect the development of relationships. Such services are required to mitigate the customers' uncertainty (e.g. Smith, 1998b). For instance, product samples play an important role in the trial phase of the product for the development of trust and satisfaction. However, once the physician found satisfactory results during the product's trial, their effects did not play much role unless the physician demanded any personally or for the patients' use. The next subsection examines the role of personalized services in the development of PSR-physician RQ.

## **G2 PERSONALIZED SERVICES:**

All the PSMs identified personalized services as playing an important role in the development and maintenance of RQ between the physician and the PSR. This is illustrated in the following, which represents many similar quotes from PSMs:

***If we rank the services, personalized services are at the top. This is because a physician will weigh it as personal and this will create the perception that the PSR has done this only for him or her [PSM-1].***

The above quote gives the impression that personalized services are valued more by the physician because such services give him or her a feeling that the PSR is doing something out of the ordinary. Likewise, sometimes a physician also demands some personalized service from the PSR. And if the PSR makes the commitment and then provides the particular service, this will lead to physician's trust, satisfaction and commitment with the PSR, as illustrated below:

***Yes, any personal service or clinical support plays important role. For instance, let's say a physician needs some blood pressure measuring equipment and demands it from the PSR. If the PSR makes the commitment and provides it, then definitely the PSR will gain both the physician's trust and satisfaction and the physician will relate this with more prescription share. This is because the PSR has fulfilled the physician's demand, therefore, the physician starts to think that it is his or her moral duty to secure the PSR's commercial objectives of prescriptions as well [PSM-4].***

Therefore, by fulfilling the physician's personalized need in the shape of clinical equipment, the PSR not only gains the physician's affective trust and satisfaction, but also affective commitment in terms of more prescription share. PSM-4 expressed why this is by identifying 'physician's moral duty'; this reflects that the PSR's conduct in fulfilling the

physician's need engenders emotional sentiments or mechanisms that lead to the physician's affective trust, satisfaction and affective commitment to the PSR. However, another PSM viewed this as the physician's cognitive evaluation of the benefits received from the PSR:

***With personalized services physician trusts in and feels satisfied with the PSR. This is because both the PSR and the physician are taking care of their benefits. The PSR fulfils the physician's benefits and as a result, the physician gives benefits to the PSR. He or she therefore reciprocates the benefits to the PSR [PSM-2].***

This quote links personalized services with the impression that the physician develops, which in turn enhances trust and satisfaction after cognitive assessment of benefits received. The physician reciprocates these benefits back to the PSR in terms of prescriptions, showing the physician's calculative commitment. The PSM's feeling that these services ensure a physician's self-interest reflect its status as a mechanism of relationship continuation. This further engender the reciprocity mechanism therefore, physician shows his or her efforts in terms of an increase in prescription share to maintain the relationships with the PSR. Palmatier et al. (2006) also found that these investments positively influence trust, satisfaction and commitment, which engender sellers' expectations of reciprocation from buyers to strengthen the relationship between them. Moreover, physicians' views on the role of personalized services are illustrated in the following:

***It depends on how someone perceives the value of personalized services, family dinners etc. If these services are valuable for someone then it definitely helps the PSR, but they are useless if somebody does not care. However, if there is a service that can be used for the patients' healthcare, this will definitely help PSR to develop good relationships. Because he or she provides at least some service(s). However, it will help initially but later on depends on its error free delivery by the PSR. And if the PSR continuously provides the service without error it will leads to longer-term quality relationships [GP-1].***

In the above quote the physician segregates personalized services into two different aspects. The first of these personalized services (i.e. family dinners and trips, physician's personal event celebrations) deals with his own-self and the second deals with the patients' healthcare (e.g. free camping for patients' awareness of disease, clinical support etc). The physician's view of the effects of the latter help the PSR in the development of quality relationships; however, the former varies from physician to physician. Therefore, he did not deny the effects of such personalized services to a physician's own-self in the development of RQ. However, he did not discuss this in detail in comparison to the personalized services offered for patients' healthcare. A similar kind of reserved behaviour from the other physicians was also observed during the interviews. The reason might be that a physician feels that to receive exclusive personalized services is professionally unethical.

Nevertheless, in the later part of the above quote the physician confirmed that personalized services that benefit patients positively affect the development of RQ between PSR and the physician. Early on it helps because it shows the PSR's commitment and efforts, as the physician expressed in his impression "at least he or she provides some

*service(s)*". And his expression gives the impression that such services trigger underlying emotional sentiments or mechanisms that lead to the physician's affective trust, satisfaction, which further engender physician's commitment. This is similar to the assertion made by Hennig-Thurau and Klee (1997, p. 752) that the customer's commitment is essentially a combination of his or her affective and cognitive evaluation of benefits gained by the relationship with a seller. This is because customers' positive experiences of relationship benefits and the effect of gratitude psychologically trigger them to reciprocate (Lee et al., 2014). Consequently a customer reciprocates in order to maintain the relationship with the seller (e.g. Palmatier et al., 2006) through the activation of a reciprocity mechanism.

However, the physician also expressed the effects only last over the long-term if the PSR continuously delivers the service(s) without error. This gives the idea of his assessment of the benefits received from the service(s) that links with the impression of development of physician's cognitive trust and satisfaction with the PSR when he or she ensure physician's self-interests that leads to the physician's commitment.

These explanations from the respondents suggest that all generalized services play a role in the development of RQ, as they show the PSR's commitment or efforts to the development and the maintenance of the relationships with the physician. If the PSR repeatedly offers such services it helps to gain physician's cognitive trust and satisfaction. Moreover, commitment is shown through the effect of such trust and satisfaction. However according to the respondents, personalized services contribute much more to the development of quality relationships in the context of Pakistan, because personalized services affect the physician's affective and cognitive trust, satisfaction and commitment with PSR through the activation of emotional and self-interest mechanisms respectively.

**4.6. Outcomes of Part B: in terms of RQ its Determinants and associated Mechanisms:**

The above two sections have examined the respondents' perceptions and understanding of RQ, the determinants required to develop a physician's trust satisfaction, commitment and hence RQ with PSR. The explanations confirmed that development of trust, satisfaction and commitment depends upon the activation of many mechanisms at one time, which are linked with the RQ determinants as shown below in table 4.3.

**Table: 4.3: Mechanisms associated to the RQ determinants, leading to RQ**

<b>Determinants</b>	<b>Mechanisms</b>	<b>Outcomes</b>
RQ determinants ensure physician's professional or technical social as well as economic needs.	Cognitive: Self-interest (i.e. Patient's wellbeing and retention of practice viability)	<b>RQ [trust (cognitive &amp; affective) , satisfaction &amp; Commitment (calculative &amp; affective)]</b> Cognitive: Self-interest plus affective or emotional mechanisms lead to reciprocity
	Affective or Emotional (Emerged due to the PSR's efforts in achieving physician's self-interest and fulfilling social needs)	

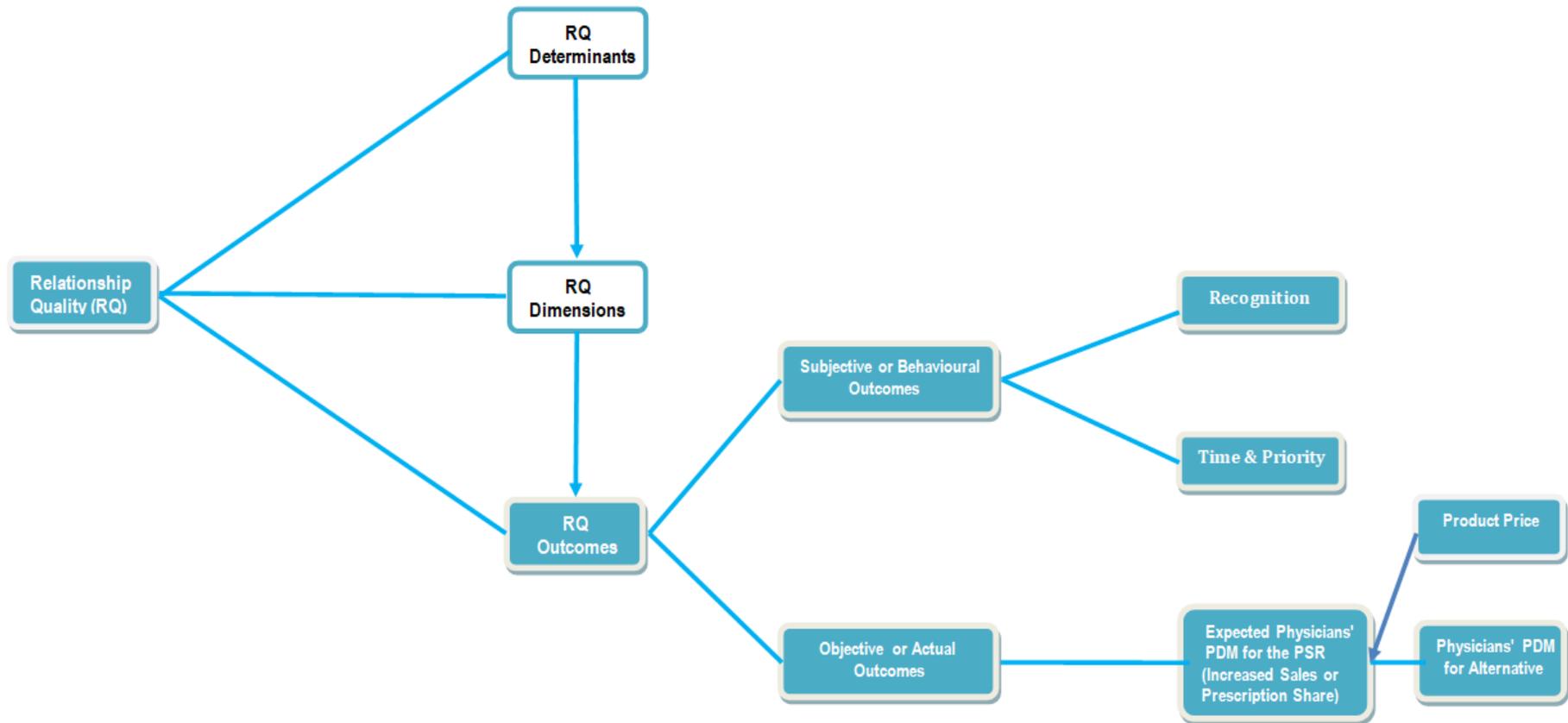
Table 4.3 suggests that the combination of the identified determinants fulfil the physician's professional or technical and economic needs that he or she assesses cognitively. Repeated episodes of such fulfilment of self-interest from PSR leads to physician's cognitive trust, satisfaction and calculative commitment. Similarly, the physician develops emotional mechanisms that were linked with the physician's sentiments, which emerged psychologically through the PSR's efforts to ensure physician's self-interests and fit their moral compass. The activation of these emotional mechanisms leads to the development of affective trust, commitment and satisfaction. Smith (2011, p. 79) also asserts that for any trust relationship, both self-interest and emotional mechanisms are simultaneously coactive and indeed, the simultaneous cooperation of these mechanisms is often necessary". This is because according to the findings trust also fosters the satisfaction, which is a customer's emotional state derived through his or her cognitive assessment of expected product or service performance and actual consumption experience (e.g. Westbrook & Oliver, 1991). Furthermore, both trust and satisfaction foster the customer's commitment (Caceres & Paparoidamis, 2007; Hennig-Thurau et al., 2001) i.e. the affective and calculative commitment. As these high-order constructs of RQ are distinct in nature but interrelated with each other (e.g. Clark et al., 2011; Mullins et al., 2014; Smith, 1998b), both cognitive and emotional mechanisms linked to trust, satisfaction and commitment to engender a physician's mechanism of reciprocity, which leads to further positive RQ outcomes for the PSR examined in the following section.

#### **4.5 PART C: INTERVIEWEES' PERCEPTION OF RQ EXPECTED OUTCOMES:**

The following section examines the views of the pharmaceutical sales managers (PSMs) and general physicians (GPs) on the outcomes that the PSR is expected to receive from the physician after the establishment of RQ. These are divided into two further subthemes, which are: subjective or behavioural outcomes; and objective or actual outcomes.

However, product price has been identified as a barrier that can affect the objective outcomes of RQ therefore, interviewees were asked what would be the outcomes when the price of the product that the PSR promotes is high to identify the expected outcomes and their underlying mechanism. All the themes, subthemes, and their identified categories are outlined below in figure 4.3.

Theoretical Concept	Themes	Sub-Themes	Categories	Sub-Categories
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*Figure.4.3: PSMs' and Physicians' Perception of RQ Outcomes*

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#### 4.5.1 THE SUBJECTIVE OUTCOMES OF RQ:

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All the respondents reported that the development of RQ (i.e. trust, satisfaction and commitment) and their underlying mechanisms further manifest themselves in some behavioural changes within the physician. Therefore, similar to the previous research, this study considers these behavioural changes as subjective outcomes that a physician exhibits positively through his or her actions during the interaction with the PSR. These are shown above in figure 4.3. where the sub-theme subjective or behavioural outcomes is connected to the theme RQ outcomes and has two further categories, which are the physician's recognition and willingness to allocate more time and priority to interact with the PSR. The following subsections will examine how RQ between the PSR and the physician contributes to providing these subjective RQ outcomes for the PSR.

##### A) PHYSICIANS' RECOGNITION:

According to all the PSMs, one of the subjective RQ outcomes was that the physician recognizes the PSR. That is to say, the physician welcomes the PSR by name when he or she enters the physician's chamber. This is illustrated in the following quote, which is similar to many others:

*When the physician calls the PSR by name this shows the PSR has a strong relationships with the physician. This is because there is huge competition and on average about fifty PSRs visit the physician on a daily basis and therefore the physician cannot remember all of them by name. So, if the PSR is called by name this means the PSR has a strong relationships with the physician [PSM-1].*

The PSMs regarded this recognition very important given the amount of competition a PSR faces. It is very difficult for the physician to remember every PSR's name and also their product(s). Therefore, if the physician recognizes the PSR, it suggests familiarity and when the PSR enters in the physician's chamber, not only his or her brand but also firm's name will come to the physician's mind, as illustrated in the following quote.

*The PSR's personality and the brand he or she is promoting will come top of the physician's mind as a result of a strong relationship. This is because the physician trusts in the PSR and also in the product, because he is convinced of the solution the PSR has communicated for physician's patients [PSM-3].*

The above quote suggests that the physician evaluates the information a PSR communicates regarding a brand and the results he or she finds in patients. And upon gaining his or her satisfaction and trust, the PSR receives special treatment, as illustrated below:

*Whenever I visit the physician, he or she recognizes me because of my previous history as a PSR and RQ. Because of this recognition, physician will give me care and offer me tea or some refreshment and will say to me: what can I do for you? And such an impression shows full sincerity to me [PSM-2].*

As examined previously, the physician expects error free delivery of product(s) or services to ensure his or her self-interest and related economic benefits, as well as patients' wellbeing. This quote signifies that the physician recognizes the PSR after the achievement of trust and satisfaction through his previous interaction history. The physician evaluates the PSR's efforts in helping the physician meet these goals. And if the PSR and the product meet the physician's expectation, both cognitive and affective mechanisms related to trust,

satisfaction and commitment are engendered for the PSR. As a result, physician gives special treatment to acknowledge the PSR's efforts and also to show his or her sincerity to the PSR. Furthermore, to preserve the relationship and to show commitment, the physician asks how he or she can help to achieve the PSR's goals. This is because a customer's recognition (or gratitude) of a seller's efforts foster positive reciprocal behaviour (Lee et al., 2014). Consequently, such physician's behaviour helps to achieve the PSR's objective to increase share or sales of prescriptions.

#### **B) PHYSICIAN'S PRIORITY AND TIME:**

All the PSMs reported that the PSR who gains more of the physician's time and priority over other PSRs has achieved an important RQ outcome. Their explanations were based on an argument similar to the one presented in the last section about the physician's need to deal with large number of PSRs. Therefore, a physician cannot afford to give much time to each PSR for a detailed sales call. However, a PSR who has RQ with the physician enjoys more time and priority to discuss product(s) or service(s) in detail. This is illustrated in the following quotes, which are different in their emphasis but similar in meaning.

*If physician asks the PSR to wait and then takes sales pitches from the rest of the PSRs to free himself, and then discusses with the PSR in detail about any study related to disease or about any services he needs, this means the PSR has a strong relationships with the physician [PSM-4].*

*If the PSR does not have RQ, physician will not give much time to him or her. This is because nowadays many physicians have fixed the days and time to see PSRs. The PSR only can see the physician once in a month and a second visit is not allowed [...]. This is only possible when he or she has quality relationships, otherwise physician will not see the PSR. As the physician has many options [PSM-1].*

In the opinion of PSM-4 it is essential that PSR gets appropriate time and priority from physician to discuss the product(s) or service(s) properly. Likewise PSM-1 viewed this RQ outcome as being able to see physicians more frequently than others who do not hold RQ. This finding is similar to the literature on RQ, where different scholars state that RQ as an outcome helps salesperson to attain customer's intentions of future interactions (e.g. Boles et al., 2000; Crosby et al., 1990). Likewise the quotes above offer a detailed account of the importance of RQ in getting a physician's time and priority as an outcome in the context of Pakistan. The quotes provide the idea that the physician has many options to get the required product(s) or services(s) as a result of market competition. However, time and priority is only given to a PSR who has RQ with the physician. The increased sales call time is much needed in order to emphasise the product's or service's benefits for the physician's patients. RQ with a physician also enables the PSR to gain priority time to discuss and reinforce the physician in extending the product or services to patients. Frequent meetings and additional time also create the opportunities for socialization (e.g. Doney & Cannon, 1997), such as sharing personal information with each other, as illustrated in the following quote.

*When the PSR has a good relationship, while seeing patients the physician interacts with the PSR in discussions about PSR's future plans or shares his own personal information. The physician gives the PSR preference over others and gives his personal time to the PSR [...]. So this all represents the signs of quality relationships [PSM-5].*

PSM-5 viewed this as an opportunity where the PSR can fulfil the physician's social needs of spending some time out of routine. This helps the PSR not only keep in touch with the physician but also in taking physician's commitment in the form of prescriptions, as illustrated in the following:

***If the physician is listening to the PSR, this means he has developed a soft corner for the PSR. Now the PSR can tell what his or her needs are that the physician has to fulfil [PSM-2].***

The quote above from the PSM gives the impression that the physician shows his or her willingness to listen the PSR after gaining satisfaction with the PSR's performance. And repeated episodes of this cognitive evaluation then trigger the physician's emotional connection to the PSR. This leads to a change in physician's behaviour and motivates him or her to provide priority the PSR in preference to other PSRs.

Similar to the above explanations from PSMs, all the physicians confirmed that PSRs got more priority and time as an outcome of RQ, with two physicians illustrating this in the following:

***When there are good relationships, the PSR presents the right information. He or she does not show attitude and gives the physician due respect and honour. It helps to produce more understanding and reduces the gap between them; therefore, the physician prefers the trials of that PSR. And if the physician gets a positive response to the product trial then he starts prescribing it [GP-2].***

***When PSRs do all the factors that I have discussed appropriately then he or she gets preference and prescription share. If you just imagine, in normal routine life we prefer our relationships too [GP-3].***

Both the quotes above from physicians give the impression that they prefer PSRs who fulfil all the decisive factors (i.e. determinants) according to the physician's expectations and developed RQ. This clearly indicates that the physician cognitively evaluates all the parameters and upon reaching satisfaction and trust, the physician exhibits such behaviour; for instance, priority in terms of frequent interaction and more time. This is helpful for the physician in order to ensure his self-interest in either professional (i.e. technical) or social needs. These self-interest mechanisms are not exclusively responsible for changes in a physician's behaviour towards a PSR. Emotional mechanisms are also involved in this process that are engendered through the activation of cognitive processes, as illustrated in the following quote from a physician.

***If the PSR is fulfilling all the parameters and my patients are getting benefits then definitely, emotional feelings will be developed for him or her since the PSR is working hard [GP-3].***

The above quote clearly indicates that emotional sentiments that act as mechanisms are also present; however, they develop through the presence and activation of cognitive or self-interest mechanisms. Therefore, satisfaction and trust with the PSR's efforts also gives the physician an impression of PSR's cooperation and customer orientation towards achievement of physician's core objective of patient wellbeing.

This section has provided the impression that RQ helps the PSR in gaining physician's recognition due to acknowledgement of the efforts he or she is putting into achieving physician's goals. However, this finding as a subjective outcome is quite different from the

existing RQ literature. This might be because of the context specificity, since there are few studies on RQ in a pharmaceutical context (e.g. Lagace et al., 1991). Furthermore, there is limited contribution from studies on RQ within developing countries (e.g. Asnai et al., 2009). However, according to findings a physician's recognition allows the PSR to stand out from the competition between the PSRs and receive special treatment from the physician because different intangible aspects of the relationship (e.g. interaction quality) cannot easily be duplicated by competitors (e.g. Roberts et al., 2003). Consequently, the PSR becomes closer to the physician due to cognitive and emotional mechanisms (i.e. related to RQ). These mechanisms change physician's behaviour positively for the PSR, and this change in physician's behaviour due to RQ leads to further outcomes; for instance, gaining more time and priority during the interaction. From the above explanations, it can also be asserted that although these outcomes are distinct in nature, they are interrelated with each other. As both cognitive and emotional mechanisms present at different psychological or behavioural levels of a physician, which are further responsible for the achievement of objective or actual RQ outcomes. These are examined in the following sections.

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#### **4.5.2 PHYSICIAN'S PRESCRIPTION DECISION MAKING AS THE EXPECTED OBJECTIVE OR ACTUAL OUTCOME OF RQ:**

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The sub-theme objective or actual outcome is connected to the theme RQ outcomes and has one data category, which is increased sales and prescription share. The following subsection examines how RQ between the PSR and the physician and related mechanisms contribute to providing these objective outcomes to the PSR.

##### **A) EXPECTED INCREASE IN SALES OR PRESCRIPTION SHARE:**

All the PSMs reported that the PSR achieves his or her firm's core objective of increasing sales or prescription share as an outcome of RQ with the physician. Their explanations were based on arguments that the main objective of the PSR, and the firm, are put into its efforts to develop RQ to achieve increased prescription share or sales. And RQ with a physician facilitates the PSR in achieving the firm's goals:

*Company's core objectives in terms of sales will follow automatically once the PSR develops good relationships with the physician. Because the core objective is to secure the business and the PSR is putting all the hard work into achieving sales; therefore, the PSR starts achieving his or core objectives [PSM-2].*

In the above quote the PSM used the word "automatically" in connotation to sales achievement as a result of RQ. This gives an impression similar to the discussion above that RQ (due to the presence of its related mechanisms) causes a positive change in the physician's behaviour towards the PSR. This in turn leads to expected sales returns in the form of more prescription share from the physician. All the PSMs reported that there are expectations that the PSR receives about 50-60% of prescriptions under a particular brand category. The reasons or mechanisms that motivate physicians to be a frequent prescriber of the PSR's brand are illustrated in the following quotes:

***Once RQ is established the physician will give about 50-60% prescription share to the PSR's brand of a particular product category, because he or she is convinced with the product and the PSR. As the PSR provides the required extra services at the satisfaction level of the physician, the physician counts all these factors, such as performance, of the PSR and the brand and thinks he or she should give maximum benefit to the PSR [PSM-5].***

This signifies that physician's trust and satisfaction with the PSR and the brand he or she is promoting leads to the physician's commitment. And physician exhibits his or her commitment by frequently prescribing the PSR's brand. The finding is also consistent with the RQ literature, where scholars found that the objective or financial outcomes of RQ were mostly influenced by customer's commitment with the salespersons (e.g. Palmatier et al., 2006; Vieira et al., 2014). This is because, both physician's cognitive or self-interest (related to patients' wellbeing) and psychological level emotional sentiments (related to PSR's efforts) act as mechanisms to engender the reciprocity mechanism that motivate physician to such actions, as illustrated below:

***Both kinds of things are there: I mean first, a physician will see the quality of a product and then will be indulged emotionally due to the efforts of the PSR. Physician will then see product quality because does not want to lose the patient and when he or she will see the PSR's effort thinks "why shouldn't I prescribe" [PSM-4].***

Similar to the above explanations, PSM-2 further explained this as the physician's natural behaviour due to the PSR's efforts for the development of RQ, as illustrated in the following quote:

***It is natural to have more sales because you put in effort and after meeting all the physician's criteria, you reach the stage where you are receiving benefits from the physician in terms of sales. In fact this is the net result of your efforts and this shows how consistently you worked and how you were behaving with your customers in the past [PSM-2].***

PSM-2's explanation gives the sense that as a result of the PSR's efforts (that shows his or her commitment) to develop and maintain RQ, the physician naturally reciprocates in the shape of a larger share of prescriptions. When the PSR has fulfilled all the physician's technical and psychological level needs consistently, the physician reciprocates to accomplish PSR's objectives in return. This also gives the impression that the mechanism of reciprocity to the PSR that engenders the physician's commitment is required to keep their relationship alive. Therefore, the physician wants to preserve his or her RQ in order to continuously receive relationship benefits from the PSR. This is because a customer's commitment to the salesperson is indispensable to maintain the enduring relationships (e.g. Parsons, 2002). Similar explanations were also gathered from the physicians, for example:

***When you develop trust and satisfaction with the PSR, you felt inclination and commitment towards the PSR. Therefore, I will be committed when I have analysed each and every angle; [for example, the PSR and his product performance] and if I am committed then I will give prescriptions to the PSR [GP-1].***

The above quote confirms that physicians involve themselves in the cognitive evaluation of each and every aspect, whether related to the quality of the product or the PSR's own efforts. If everything meets with the physician's expectations, he or she will develop trust in and satisfaction with, the PSR, which leads to commitment to the PSR. Moreover, the physician

clearly linked his prescription decision making with commitment, which gives the impression that the prescription decision is mostly influenced by the presence of commitment through the activation of mechanisms of reciprocity. However, the above quote also demonstrates that RQ played a role in the physician's decision making and suggests they frequently prescribe where they feel it is appropriate to prescribe the PSR's product, as illustrated in the following quotes:

***Strong relationships play their role and we frequently prescribe the product of those PSRs with whom we have strong relationships [GP-2].***

***Well, I would definitely prescribe the PSR's product because I have a quality relationship, but only where I find a place for that particular product [GP-3].***

Both quotes above signify that although RQ and its related mechanisms play a role in the physician's decision making, there are other mechanisms that the physician takes into account. In the quotes above physicians use certain phrases; for instance, GP-2 used "play a role in prescription decisions" and GP-3 expressed "where he finds the place he will prescribe". These phrases suggest there might, or definitely will be, medical conditions and secondly, socio-economic issues that need the physicians' attention before they make prescription decisions.

In summary, sections above examined the expected outcomes of the physician-PSR dyadic RQ. The physicians and the PSMs confirmed that RQ between the PSR and the physician fosters positive behavioural changes (i.e. subjective outcomes) in the physician; which further leads to the objective or actual outcomes in terms of increased in prescription share or sales for the PSR. The above explanations also provide the idea that the subjective or behavioural RQ outcomes are stable if the PSR meets all the physician's criteria and then maintains RQ with the physician. However, the objective or actual prescription decision making that leads to value adding activity in terms of sales increase as an outcome can only be observed if everything seems appropriate for the physician. Because, the forces or mechanisms determining the prescription decision making of physicians are complex and numerous (e.g. Hellerstein, 1998). Since the physician operates in an open system, there might, or will be, medical conditions and the socio-economic issues that also need physicians' attention before they make an actual prescription decision making. Medical reasons and the technical aspect are understood; for example, the physician has to see which disease indications apply before he or she can prescribe the PSR's product. However, the socio-economic condition in terms of the patient's ability to afford the PSR's product is another matter that the physician has to consider in the context of Pakistan. This aspect was already identified and examined in the section 4.5.1-2.2 on the 'product price', where respondents perceive the higher product price as a barrier to the objective outcomes of the RQ. The following section briefly describes the effects of the higher product price on RQ's objectives outcomes and underlying mechanisms identified through the data generated from the first phase interviews. These aspects are incorporated in the revised conceptual framework but are explained in more detail in chapter 5 in order to avoid repetitions in the

text. The explanations of these aspects by the phase one interviewees were similar to those generated in phase two interviews.

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#### **4.5.3 INTERVIEWEES PERCEPTION ON RQ ACTUAL OR OBJECTIVE OUTCOMES IN THE CONTEXT OF HIGHER PRODUCT PRICE:**

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Two variant responses were identified by the respondents with regard to PSR's high price product and physicians' prescription outcomes: either they give a prescription to the PSR or switch to an alternative. These outcomes were contingent upon the patient's particular economic and medical contexts or conditions. This is because the economic conditions of the majority of patients in Pakistan are not sound (please see appendix 8, Q-13a & b). Therefore, if the PSR's product price is higher than the patient can afford, it causes a change in the physician's prescription decision making and he or she will switch to an alternative low price product, as illustrated in the following quote:

*The relationships with the PSR are there and I mean them but if the PSR's product price is too high then definitely I will not prescribe it [GP-2].*

All the PSMs and physicians provide many reasons to switch on an alternative product such as: physicians have a strong relationship with patient and they care more about their relationship with patients than a PSR. Because if they do not care about the patient's economic conditions, there is a fear that the patient will switch physician. Furthermore, on professional grounds they should also care more about the patient's wellbeing. Finally, they have emotional sentiments for the patients on the grounds of humanity (please see chapter 5 for more detail). Therefore, both their self-interest and emotional sentiments for patients act as mechanisms and interact with PSR-physician's RQ, which causes the change in a physician's behaviour and he or she switches to an alternative more economic product (please see quotes 13c, d, e in appendix-8 on these aspects).

Nevertheless, respondents accepted that the physician will prescribe the PSR's more costly product where a patient can afford it or when he or she comes with a more serious illness, as illustrated in the following quote, which is representative:

*If a PSR's product price is high I will prescribe it to patients where affordability is not an issue. [GP-3].*

This suggests that physicians feel confident to prescribe the PSR's costly product when the patient can afford it. This is because the physician trusts in the PSR's product's efficacy, which in turn acts as a mechanism that ensures the physician's self-interest in the patient's wellbeing. Furthermore, other RQ related mechanisms (i.e. emotional and reciprocity) become more active and the coexistence or activation of all these mechanisms helps the physician to choose the PSR's more costly product; so that he or she can achieve self-interest in the patient's wellbeing, retention and therefore income.

#### **4.6 SUMMARY & REVISED CONCEPTUAL FRAMEWORK:**

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In summary chapter 4 has examined the respondents' perceptions and understanding of RQ its determinants and outcomes. By and large, respondents have confirmed all the RQ determinants that constitute the initial conceptual framework. Furthermore, from their responses a few more PSR related determinants emerged outside of the initial conceptual framework, outlined below with dark blue colour blocks in figure 4.4, which shows the revised conceptual framework as an outcome of these findings.

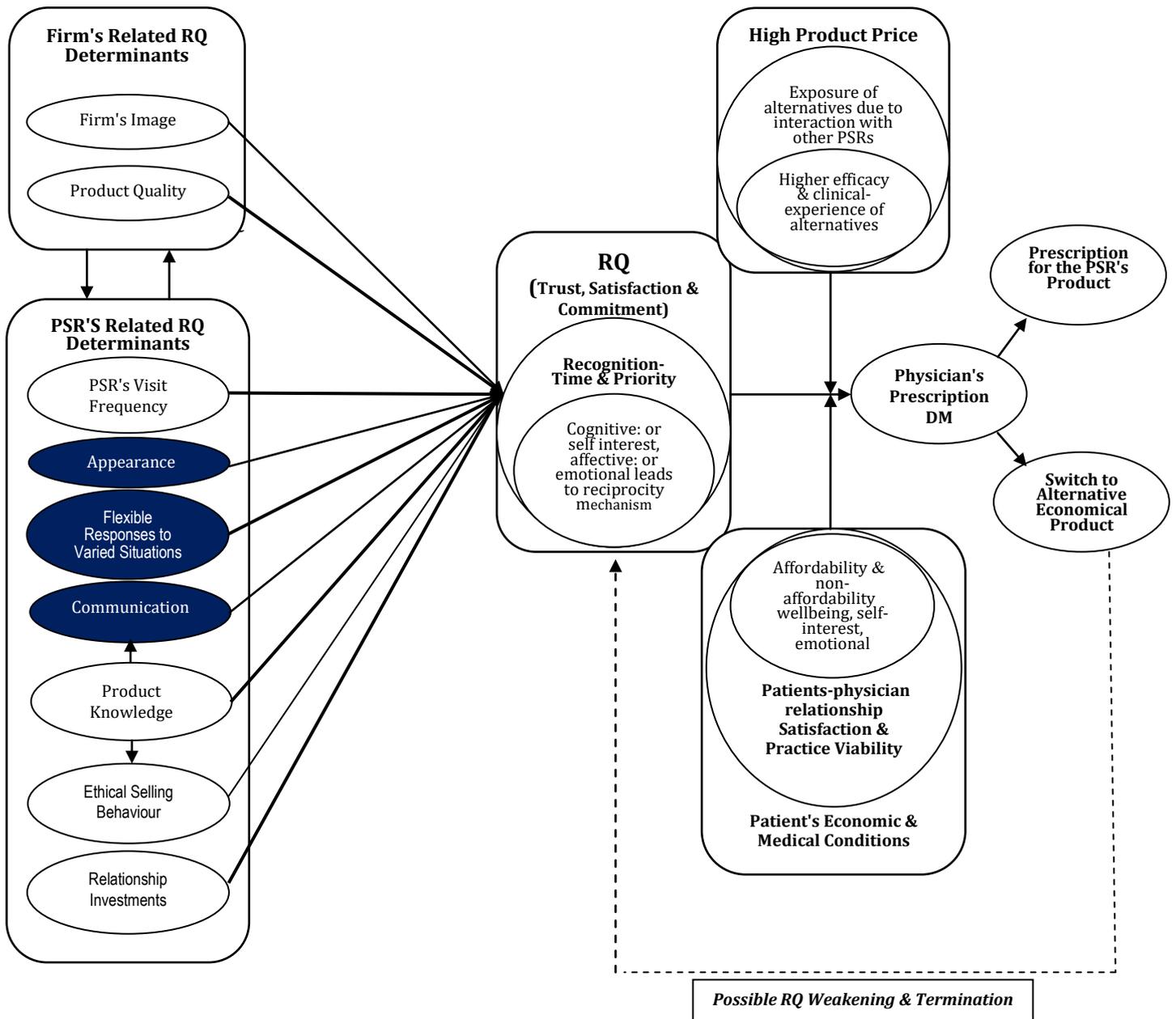
The development of RQ, which encompass trust, satisfaction and commitment, depends upon the simultaneous activation of many underlying mechanisms of the identified RQ determinants revealed above. The most prevalent mechanism was self-interest, associated with the physician's professional, technical, and economic needs. The professional needs have a relationship with the patient's wellbeing and the economic needs are associated with the physician's practice viability in terms of patient retention and physician's earnings. Moreover, the emotional mechanisms that are linked with the physician's sentiments also emerged psychologically through the PSR's efforts to ensure the physician's self-interest and also the physician's moral compass. These cognitive and emotional mechanisms engender mechanisms of reciprocity that further lead to positive RQ outcomes for the PSR i.e. subjective or behavioural and objective or actual.

The subjective outcomes are those that a PSR benefited from during the interaction with the physician in terms of physician's positive behaviour, such as time priority over other PSRs, and recognition. The objective RQ outcomes are linked with the physician's actual increased prescription decision making of the PSR's product. According to the respondents, the subjective outcomes of RQ are stable; however, its objective outcomes in terms of prescription decision making are not consistent, particularly when the PSR's product price is high. Objective outcomes are contingent to the patient's economic and medical conditions.

The different economic contexts of patients also produce different mechanisms (i.e. patient's affordability and non-affordability). The other most prevalent mechanisms were physician's self-interest towards the patient at two different levels i.e. the patient's wellbeing which had its links with physician's professional ethics and also with patient's satisfaction, retention for physicians' own practice viability. Physicians' also had sentiments of humanity, empathy and sympathy for the patient, which act as mechanisms. Furthermore physician's clinical experience of alternative products also serve as mechanisms in physicians' prescription decision making in different conditions of patients (please see chapter 5 for more detailed examination).

The combination and activation of specific mechanisms give rise to different physician decision making outcomes. When the patient's economic conditions are sound, the PSR gets a prescription from the physician. However, if the patient cannot afford the PSR's product, a physician switches to the alternative, more economical product. However, the physician's regular switching towards the alternative economical product can weaken the RQ that can ultimately leads to relationship termination. Since according to the respondents physician's

prescriptions of the PSR's product reflect physician's commitment to the relationship, which is necessary to maintain enduring relationships.



**Figure 4.4: Revised conceptual framework for the current research**

The above explanations and the evidence result into the revised framework, which shows that if the product's price is high, the PSR's RQ performs more effectively (in terms of the physician's prescription decision making) when the patients' economic conditions are sound. However, to further verify the efficacy of RQ and the revised framework, the next chapter examines all the mechanisms identified above and their configurations in two different economic patient contexts (i.e. the urban and rural sales areas of Multan, Pakistan). This not only enables the study to verify for whom and in what economic context RQ works more effectively in terms of achieving its objective outcomes but also establishes the authenticity and viability of resultant revised conceptual framework.

## **5 RURAL & URBAN SALES AREAS WITHIN DIVISION OF MULTAN**

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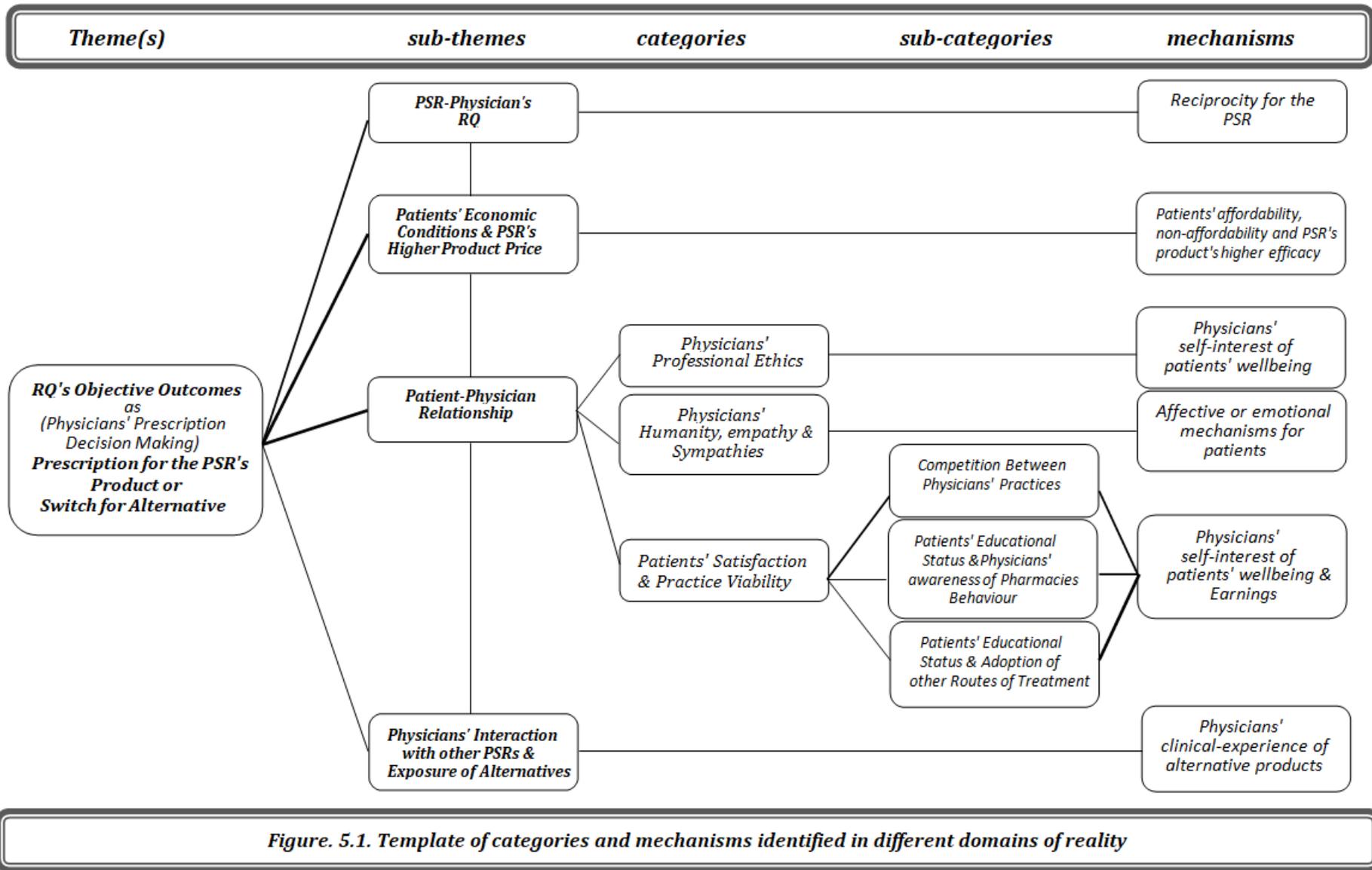
### **5.1 INTRODUCTION**

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The previous chapter explored and examined the required determinants and their underlying mechanisms that lead to RQ between the PSR and physician. It also examined how RQ, through the effects of its underlying mechanisms, produces objective outcomes under the patient's contingent economic conditions. The results indicated that PSRs who promote a high price product achieve RQ's objective outcomes more effectively when a patient has sound economic conditions, as compared to a less affluent patient, due to the interaction of various mechanisms. Therefore, in order to verify the presence of the underlying mechanisms identified, which cause certain outcomes, this chapter further investigates these mechanisms' interaction in two different patient economic contexts. In doing so, the overall aim was to find when, and how, particular patients' context and above identified mechanisms interact to produce change in a physician's prescription decision making; in order to verify for whom and under what conditions, or contexts, RQ is more effective in terms of achieving its objective outcomes. This was done through extending the investigation further by considering two embedded sub units, i.e. urban and rural sales areas of Multan, due to the different economic conditions of patients living in these areas (please see detail in chapter 3 on methodology).

This chapter begins by describing the physicians interviewed in rural and urban sales areas of Multan. Following this, the next section provides physicians' confirmation on their RQ with PSRs and underlying mechanisms associated, which lead to expected objective outcomes in terms of physicians' prescription decision making of the PSR's product. In order to verify further mechanisms, the subsequent sections then examine the physicians' explanation for their RQ's expected outcomes, when RQ interacts with the price of a product that a PSR promotes. This leads to the next section, in which physicians explain the overall economic situation of the particular area they are practicing in, which leads to further emergent sub-themes and categories. This leads to consideration of the physicians explanations of for whom and under what conditions, or contexts, RQ is more effective in terms of achieving its objective outcomes. Finally the chapter provides the summary of its outcomes.

The categories and sub-categories confirmed and/or emerged from the resultant data, with associated mechanisms outlined in figure 5.1 below. In terms of a critical realist position, these categories are present at the domain of actual and real. That is, the physician's particular prescription decision that can be observed in the empirical domain is activated by the presence of different mechanisms and their activation is at the domain of actual and real.



## **5.2 INTERVIEWEES: RURAL AND URBAN AREA PHYSICIANS**

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Altogether fourteen physicians were interviewed face-to-face, i.e. seven in both rural and urban sales areas, in order to confirm physicians' explanations about the causes (or mechanisms) of their RQ with PSRs and its expected outcome for PSRs. Similar to the phase one interviews, physicians were also asked about the expected outcomes when RQ interacts with a high product price under patients' contingent economic conditions of rural and urban sales area of Multan. The characteristics of the rural and urban sales area physicians are outlined in tables 3.4 and 3.5 (please see section 3.6.2 in chapter 3).

## **5.3 PHYSICIANS' EXPLANATIONS ON THE RQ & ITS MECHANISMS LEADING TO OBJECTIVE OUTCOMES:**

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In general, all the physicians practicing in rural and urban areas of Multan confirmed that the RQ determinants in the revised conceptual framework, were necessary to develop RQ between the physician and PSR. Similar to the findings of chapter 4, and existing literature on RQ, their explanations also confirmed that all the determinants were required to ensure the development of trust (i.e. cognitive and affective), satisfaction and commitment (i.e. calculative and affective). That is to say, when the PSR fulfils the physician's technical or professional self-interests; they also develop affective or emotional sentiments that act as mechanisms for the PSR when the physician recognises the PSR's efforts in the accomplishment of technical or professional self-interest that also fulfils a physician's social needs (e.g. Hennig-Thurau & Klee, 1997). Consequently, the PSR develops RQ and receives both subjective and objective benefits from physicians. The following quote from one of physicians from a rural area illustrates the subjective benefits or outcomes of RQ for a PSR during his or her interaction with a physician, and also the objective outcomes:

***This is natural, when 5-6 PSRs come together at the same time for their sales calls, I ask all the other PSRs to discuss their products first. However, I ask the one I have a good relationship with to sit and I give him or her more time and prescriptions [RGP-4].***

This clearly indicates both the subjective and objective outcomes a PSR receives as a result of RQ with a physician. Therefore, based on the findings of the previous chapter and also on the above explanations; physicians were asked if they held emotional sentiments for the PSR or they saw all the PSR's efforts rationally in order to verify the presence of self-interest and emotional mechanism leading to RQ. Their responses are illustrated in the following quote, which represents other physicians' views (please see appendix 8, Q-15):

***I will prescribe the PSR's product because the PSR visits me and he or she works hard, the product also has quality, therefore I will definitely prescribe [RGP-7].***

This clearly signifies that the physician cognitively evaluates not only the PSR's efforts but also the performance of the product. If all the PSR and product related factors are at satisfactory level in terms of the physician's expectations, the physician will be more likely to develop RQ with a PSR. This is because the PSR ensures the physician's professional or technical self-interests by delivering effective knowledge of the product or by offering a

quality product or by adapting his or her behaviour during a sales call, etc. Repeated episodes of such conduct by a PSR as a result of frequent visits not only gives the physician a sense of accomplishment of his self-interest, but this also engenders the physician's emotional sentiments that act as mechanisms in favour of the PSR. This is illustrated in the following quotes:

***I cannot say that I develop emotional feelings for the PSR. However, I think there is a high rate of unemployment here, and the PSR is working hard for his or her job to earn and survive. We should acknowledge his or her efforts [RGP-2].***

***There is no doubt that we develop emotional feelings for some PSRs. This is because they work with sincerity. They may be not only bringing up their children but also taking care of their parents. Therefore, they should be cared for by us [UGP-6].***

These quotes signify that physicians not only take account of the patients' economic conditions but also the PSRs', when they have RQ. Their explanations give an impression about their knowledge of competition within the pharmaceutical industry and level of unemployment in Pakistan. They expressed their full awareness regarding the role of the PSRs in terms of achieving their sales quotas to survive within this profession. They also showed their concern about the PSRs with whom they have RQ, and who work hard, with sincerity, in order to fulfil their responsibilities towards their families. All these factors lead to the physicians' emotional feelings for the PSRs as they developed strong psychological bonds with the PSR, as illustrated in the following quote:

***There is not only rational assessment but emotional feelings are also present for the PSR with whom you have RQ. That is to say, a pleasant relationship is developed with a PSR and he or she comes into your liking. In fact this is due to the development of strong psychological bonds with a PSR [RGP-6].***

This signifies that physicians take care of the PSR's job survival because physicians like him or her due to the exhibition of persistent efforts they make, not only to fulfil the physicians' technical self-interest but also their social level needs. The fulfilment of the social level needs leads to the development of physicians' strong psychological or emotional bonds for the PSR. These findings are similar to the existing literature on RQ, where different scholars asserted that RQ between buyers and sellers creates the bonds of intra-psychological kind (e.g. Hennig-Thurau & Klee, 1997), which include emotional sentiments (e.g. Al-Alak, 2014). Therefore, these emotional sentiments act as mechanisms, along with the self-interest mechanisms, to further foster the physicians' reciprocal actions in terms of their care for the PSR's objectives of an increased share of prescriptions from them. This is illustrated in the following:

***PSRs trust in us and we trust in PSRs. They honoured us, therefore we have to give honour to them [UGP-6].***

Thus, this confirms the findings of previous chapter that the presence and combination of RQ related mechanisms fosters the physician's reciprocity mechanism, which leads to both the subjective (i.e. physicians' time and priority) and objective or actual outcomes (in terms of prescription share from physicians (please see section 5.6)). However, in order to verify the interaction of PSR's high product price with PSR's RQ under particular patient' economic

context, the physicians were asked what happens, if the price of the PSR's product was high. This involved questioning whether they would prescribe products sold by PSRs with whom they had RQ. Both rural and urban physicians' responses were negative: these responses are examined and are discussed in the following section.

#### **5.4 PHYSICIANS' EXPLANATIONS ON RQ OBJECTIVE OUTCOMES IN TERMS OF THEIR PRESCRIPTION DECISION MAKING WHEN THE PRODUCT PRICE IS TOO HIGH FOR PATIENTS**

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Similar to phase one interviewees, all the rural and urban area physicians unanimously confirmed that they would not prescribe a PSR's product if the price was too high for patients and would switch to an alternative, more economical product. They explained that the economic contexts in which they operated did not let them prescribe PSRs' products on a regular basis that patients cannot afford. The following sections examine the explanation of the contexts of the rural and urban areas in which physicians were operating to identify the contextual mechanisms.

##### **5.4.1 PHYSICIANS' EXPLANATIONS OF THE ECONOMIC CONTEXT IN WHICH THEY ARE PRACTICING:**

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All the physicians confirmed that in general, the economic conditions of patients were not sound in rural areas and that it was vital to consider those conditions during the choice of a product. The following quote illustrates their sensitivity and awareness of the general economic conditions of patients living in rural areas, it represents other similar quotes (please see appendix 8, Q-16):

*The economic conditions are not good here in general. Patients sometimes sell their assets, e.g. their cattle or something else, to bear the cost of treatment [RGP-3].*

This response suggests that they were aware of their patients' poverty in terms of how difficult it was for them to bear the cost of treatment, and patients were sometimes forced to sell their assets to have healthcare services. Since in rural sales areas the Government health facilities are not adequate (e.g. Akram & Khan, 2007); therefore, patients seek healthcare services from local physicians (e.g. Muhammad, 2014), this is also illustrated in following (please also see appendix 8, Q-17):

*Here in Pakistan, people even cannot afford their food because they are so poor and poverty is increasing day-by-day. Government is not providing enough health facilities and if I as a physician do not take care of patients, where will they then turn? [RGP-2].*

This signifies that physicians know that the Government health facilities are not satisfactory and in such conditions while prescribing a product they have to take care of their patients who may not have enough to spend on their food. Therefore, physicians keenly investigate patients' affordability to provide them the best solution for their particular disease or ailment within their budgets, as illustrated in the following:

***I always find and keep the economic conditions of the patient in my mind [...], I always look at the patient's pocket. No matter how strong the relationship I have with the PSR, I always focus on patient's affordability. I only prescribe the PSR's product when it is required, but in conjunction with the patient's affordability [RGP-6].***

This signifies that the patients' non-affordability mechanism, due to the PSR's high price product, leads to a change in physicians' behaviour and hence their prescription decision of an alternative product that the patient can afford.

Similar to the explanations from the rural area physicians, the physicians from urban areas also confirmed that there was no doubt they frequently prescribed the products of PSRs with whom they had RQ. However, they explained that this was only possible if the product price was competitive compared to those available under the same product category on the market. They would not prescribe the PSR's product on a regular basis if the product price was high, and instead switch to an alternative product. Physicians' reasons for this course of action are outlined in the following quotes:

***The majority of people here are not economically sound, even sixty percent of the urban population are below the poverty line. The remaining forty percent of the population has some other commitments e.g. they have to maintain a good life standard and they have to spend on the education of their children. Therefore, we have to be careful during prescription decision making [UGP-5].***

***There is a misconception that people living in posh areas are economically well-off and therefore they can afford to buy everything. These are white-collar people. Even though they are earning well, if I prescribe two to three thousand rupees worth of medicines on a daily basis, they cannot cope with this. For instance, if I myself earn fifty thousand rupees a month and a physician prescribes me fifteen thousand rupees worth of medicine for a month, how will I managed the rest of the other household expenses? I cannot afford it [UGP-6].***

These quotes from urban area physicians clearly indicate the physicians' awareness, sensitivity and reservations to prescribe high price products. UGP-5 explained the overall economic conditions of the people living in urban areas and reported that only forty percent of people could not be considered as poor. However, both UGP-5 and UGP-6 provided an explanation about the forty percent of the population who were considered to be from a well-off economic class; and exhibited their awareness about other household financial commitments of people living in urban areas. UGP-6 puts himself into the patient's situation, which implies the physician's empathy for patients in urban areas that then influences his reservations to prescribe the PSRs' high price product, even when they had RQ.

In summary the economic conditions in rural and urban areas were not similar in that the population in rural areas simply cannot afford high priced products, because their income is dependent primarily on agriculture. On the other hand, the population in urban areas generate more income; however, their other household financial commitments also make the PSR's high priced products unaffordable for them. Physicians who had been practicing for more than ten years in both these areas had full awareness about their patients' limited ability to afford healthcare related services, which led to physicians' unwillingness to prescribe PSR's high price products. Thus, according to the above explanations, *the patient non-affordability* mechanism was prevalent in both the rural and urban areas due to different reasons as explained by the physicians. These findings are also similar to Al-Areefi

and Hassali (2013), who found that physicians switch to an alternative cheaper product that a patient can afford in the context of Yemen due to his or her non-affordability of a quality product with a high price.

Moreover, in accordance with the findings and to verify other mechanisms identified in chapter 4, physicians were also asked why they cared more about their patients' economic conditions rather than the PSR with whom they had RQ. Physicians explained the reasons or causes were quite similar to those revealed in chapter 4, which were categorised further into two themes. These were: physicians' relationship with patients; and physicians' relationships with other PSRs. Each is examined in the following sections.

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#### **5.4.2 PHYSICIAN-PATIENT RELATIONSHIP:**

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Similar to phase one interviewees, all the physicians in rural and urban areas confirmed that they also had a relationship with patients, therefore patients' satisfaction was a vital aspect for them. This is illustrated in the following:

*Patients come repeatedly to you as a family physician. Seventy percent of patients are those who regularly come to you for their treatment, which leads to a sort of relationship between us, therefore you think more about patients' benefits than PSRs' [UGP-3].*

*Patients' trust in physicians, all this system between the patient and physician depends on a patient's trust in a physician [RGP-5].*

This signifies that there is a presence of strong physician-patient relationship and physicians do not want to distort patients' trust in them. This is because, patients' trust a competent physician who takes appropriate responsibility and control, and makes patient welfare their highest priority (e.g. Ehsan & Ashill, 2014). Thus, they care more about patients' satisfaction in order to retain patients' trust level since both trust and satisfaction are necessary for enduring relationships. Three further categories were identified in relation to the emergent sub-theme 'physicians' relationship with patients', i.e. physicians' moral or professional ethics as an agent of the patient; physicians' humanity, empathy and sympathies as an agent of the patient; and physicians' professional relationship with patients in term of their practice viability. These identified categories are examined below.

##### **5.4.2.1 PHYSICIANS' MORAL OR PROFESSIONAL ETHICS AS AGENTS ON BEHALF OF PATIENTS:**

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All the rural and urban area physicians confirmed that there were some moral or professional ethical reasons that they had to comply with during the prescription decision making process. The rural area physicians explained it was part of their professional ethics to consider patients' welfare as a first priority, as illustrated in the following quote, which represents similar views (please see appendix 8, Q-18):

*It is because of my medical ethics that I consider the patients' benefits first as I know about the economic conditions of my patients in terms of which family and economic class they belong to [RGP-1].*

This quote above suggests physicians' feelings that they act on behalf of the patients, therefore they have to consider not only the patients' physical and mental but also their

economic conditions as well. Since physicians know about the patients' family or economic class, if the physician prescribes, due to RQ, a PSR's product that is beyond the patient's affordability, this act will be considered as unethical, as illustrated in the following quote:

***My relationships with PSRs and professional ethics should coincide. If you leave professional ethics and give your relationships priority, this would be an injustice to your profession [RGP-4].***

The quote above suggests that the PSR's RQ related mechanisms are present; however, they are affected when the physician's follows his professional ethics regarding patient wellbeing. They might consider their relationships with PSR while making their prescription decisions; but not at the cost of their patients' wellbeing. Because they fully understood the notion of conflict of interest and their professional norms (Chimonas et al., 2007). This implies that physicians can only oblige the PSR (due to the presence of the reciprocity mechanism) when they feel that by obliging the PSR, they are not being unethical. Similarly, all the physicians from urban areas explained that it was against their professional ethics if they knowingly prescribed a PSR's costly product to a patient who cannot afford it, as illustrated in the following quote:

***One of the reasons to not consider the PSR's product is the overall social-economic conditions of the patients. Even some patients belonging to the middle class cannot afford the cost of medicines. We do not want to make our patients a victim. Therefore, it is a basic of our professional practice to take account of the economic consequences for patients [UGP-4].***

Therefore, because even some middle class patients struggle to afford medicines, physicians provide economic compliance to their patients, so that they can meet their other financial commitments:

***Because of professional ethics, I do not consider the PSR's costly products. Because I mentally calculate the patient's income, my fee, and the cost of medicine, therefore, I try to accommodate the patients, so that they do not feel an extra load. This is what we have to see at GP level practice [UGP-2].***

The physician assesses the patient's overall cost of treatment and then chooses a product that is commensurate with the patient's financial situation, to avoid unnecessary load on him or her in meeting other commitments. Therefore, for physicians it is entirely unethical to put an extra burden on the patient for the sake of their RQ, since a physician is there to ensure the patients' wellbeing, as illustrated in the following:

***There is no doubt we have good relationships with some PSRs but the basic theme in our mind is to ensure patients' benefits. Therefore, I respect my relationships with PSRs. However, if their product price is high and the patient cannot afford it, then we have to act accordingly [UGP-6].***

Thus, the physician has RQ with the PSR but they consider their relationship with patients as a priority. This is similar to the explanation from the rural areas physicians that RQ related mechanisms are present; however, they are affected when the physician prioritises professional ethics with regard to a patient's wellbeing. This further illustrates the reciprocity mechanism that a physician engenders for the PSR due to RQ will only activate to affect physician's prescription for the PSR's product when he or she feels their professional ethics towards patient's wellbeing will not be compromised. The following illustration gives further clarification:

*We prescribe the PSR's costly product either to patients who can afford it or where we feel it is appropriate. We favour the PSR because both the PSR and the product he or she promotes are excellent. This is a sort of favour that one can do for his friend, i.e. this is helpful for the PSR in terms of career promotions, as his product's sales will be increased. However, one should only favour a PSR in a way that nobody else has to bear the burden of this decision. I mean if I overlook the patients' wellbeing, this is totally unethical [UGP-6].*

This implies that the physician cognitively and affectively evaluates the PSR's and his product's performances, which leads to trust, satisfaction, commitment and thus RQ. Consequently the physician reciprocates by prescribing the PSR's costly product when he or she feels it is appropriate, i.e. either to the most affluent patients or where a patient's medical condition demands a higher quality product. The physician explanation of this behaviour indicates that he holds good wishes for the PSR's promotion, which further implies that the physician develops emotional sentiments due to the PSR's honesty, integrity and reliability. Therefore, both rational and emotional mechanisms related to RQ are present and further foster the reciprocity mechanism that leads to the physician's prescription decision making of the PSR's product. However, the physicians clearly explained that it is only possible if there is no burden on the patient, otherwise it would be considered as an unethical conduct by the physician.

In summary, the general economic conditions of the urban areas were slightly better than the rural areas in terms of income; however, the urban area patients had to fulfil other financial commitments that engendered reservations in the physician to consider the PSR's costly product. These explanations confirmed that patient's wellbeing mechanism (in terms of patient's disease or ailment recovery by means of economic-compliance) comprises the core professional ethics of physicians both from the rural and urban areas. Beside this self-interest in the patient's wellbeing, physicians also develop emotional sentiments that act as mechanisms in favour of patient's wellbeing, as examined in the next section.

#### **5.4.2.2 PHYSICIANS' HUMANITY, EMPATHY AND SYMPATHY AS AGENTS OF PATIENTS:**

All the rural and urban area physicians confirmed that they also developed emotional mechanisms, which were linked with their sentiments of humanity, sympathy and empathy with the patient. These sentiments emerge because of the serious consequences if the patient did not receive the proper medication due to its non-affordability. The emotional sentiments or mechanisms that emerge through physicians' humanity for patients are illustrated in following quotes:

*For a physician, humanity has a top priority as this is the first step and we should focus on it. If you do not understand the patient's entire problems, I do not think you would be successful in this profession [RGP-5].*

*In actuality, it is humane to care about patients' ability to afford as an important aspect during prescription decision making. Because, if you do not care about this and prescribe costly medicines that leave the patient in a miserable condition, this is an unkind behaviour towards the patient [UGP-6].*

These above quotes from both the rural and urban areas physicians illustrate that they have emotional sentiments, which are linked with their humanity for their patients. Therefore,

physicians prioritise their relationship with patients rather than with PSRs and ensure patients' welfare by prescribing products that a patient can afford to avoid serious health related consequences. The literature on medical marketing also echoes to the above explanations that physicians' hold more favourable attitude towards their patients (e.g. Lundin, 2000). Physicians also confirmed their humanity through the responses showing their empathetic sentiments for patients, as illustrated in the following quote, which is representative of many others (please see appendix 8, Q-19 and 20):

***I am living in the same society; I myself feel the effect of costly medicines when I buy for somebody ill in my family even though I have a better economic status than the majority of patients [RGP-3].***

The quote above signifies that they place themselves in the patients' economic situation. They psychologically develop emotional sentiments that act as mechanisms about how they feel in a situation when they buy costly medicines for themselves, even though they have good economic conditions. Thus, such empathic behaviour for patients and presence of psychological emotional kind of mechanisms also develop physicians' reservations to consider the PSR's high price product. Besides the physicians' humanity and empathy, they also confirmed that they develop sympathies for patients:

***They can't afford each and every thing; they can't enjoy air conditioning or even air coolers. They just use fans in summer. So I can't put them under too much pressure of cost of medicines or costly medicines [RGP-1].***

***There is no doubt we develop sympathies for patients [...]. This is because if a patient has already suffered with a disease for a week or ten days (e.g. such as typhoid), his or her parents have also suffered with this and they want the patient to get well overnight. Furthermore, they also spend a lot of money for the treatment [RGP-6].***

These quotes from the rural areas physicians signify their psychological corroboration about their sympathies for patients facing economic difficulties. RGP-1 provided an explanation of what he feels about his patients' overall socio-economic conditions particularly those who cannot afford household essentials that can make their lives easier. For instance he referred to air-conditioners, which becomes necessary in summer because of very hot weather in Multan. RGP-6's explanation on the other hand gives the impression that physicians' develop sympathies for not only the patient but also his or her family members (e.g. parents), who also go through psychologically tense period due to the patient's disease and their own inability to afford related expenditures. Thus, physicians' in such events develop their sympathies for patients that engender emotional mechanisms that leads to physicians' reservations to prescribe the PSR's high price product, as illustrated in the following quote from urban areas physician:

***Both my ethics and sympathies for the patient are at work. The ethics deal with our evaluations of a product's economy, efficacy and compliance but you cannot rule out the role of sympathies. The PSR does his or her job but I have to do mine and in all this the emotional connection with a patient also works to consider his or her economic condition [UGP-3].***

In the above illustration the physician acknowledged that there is no doubt the PSR does his or her job in a good manner; however, the physician has to make a prescription decision in

an ethical way by considering all the factors, i.e. product's efficacy, compliance and economy. This therefore confirmed the presence of the mechanisms related to physicians' ethics (i.e. self-interest in the patients' wellbeing). However, it also confirmed the presence of mechanisms of an emotional kind linked with their sympathies for patients due to their poor economic conditions. That leads to a change in physicians' behaviour of their choice of a product and they switch to an alternative of a low price rather than consider the PSR's product, in order to provide economic benefit to patients. Apart from the ethical and emotional considerations, physicians also explained that they also have a professional relationship with patients, which is linked to their practice viability.

#### **5.4.2.3 PHYSICIANS' PROFESSIONAL RELATIONSHIP WITH PATIENTS IN TERMS OF PATIENTS' SATISFACTION, THEIR RETENTION AND PHYSICIANS' OWN PRACTICE VIABILITY:**

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All the physicians in rural and urban areas confirmed that patients' satisfaction was a vital aspect for them. Therefore, in order to achieve patients' satisfaction they had to provide economic compliance to the patients, not only because of their professional ethics and sympathies but also to retain and maintain patients as their clients.

Three further sub-categories were emerged and identified in relation to the category physicians' professional relationship with patients in terms of patients' satisfaction, their retention and physicians' own practice viability. Firstly because of competition within the physicians' practices; secondly, physicians' awareness of pharmacies behaviour; and thirdly, patients' adoption of other routes for treatment due to a lack of education. These identified categories are examined in following sections.

#### **A) COMPETITION WITHIN PHYSICIANS' PRACTICES AND POSSIBILITY OF PATIENTS SWITCHING PHYSICIAN:**

As mentioned above (chapter 4), in Pakistan there is competition among physicians in terms of their practices. Many physicians practice in the same locality (i.e. on the same road or street), therefore patients have easy access to approach a range of physicians near their local residences. If a physician fails to cure a patient quickly within their budget, there is a potential risk of the patient's withdrawal and shift to another physician. Hence, to make a practice viable, a physician must ensure both the quality and economy of a product, as his earnings are dependent on the number of patient visits to that particular physician. This aspect was best explained by one of the urban area physicians, as illustrated in the following quote which represents many others:

*If you are practicing alone in the entire location, patients have to come to you anyway; it is up to you, whatever you want to prescribe you can. In such a situation all the PSR relationship related factors will influence the prescription decision more. But, when you know that patients have many options, then in this situation you have to consider the patient's economic conditions [UGP-2].*

This signifies that physicians were facing competition from other physicians and patients had the opportunities to switch physician if they perceive the one is too expensive for them. This therefore creates reservations in the mind of physicians when considering a PSR's

expensive product, and they prefer to provide economic compliance to the patients to achieve their satisfaction in order to retain and maintain patients as their clients. In such conditions physicians still have RQ related reciprocity mechanisms for a PSR; however, its effects are mitigated due to the PSR's product price and patients' inability to afford it. This is illustrated in the following quotes from two rural physicians:

***No matter how much the PSR is a favourite of mine, I prefer the patient more, because if the patient does not recover, he or she will not come back, nor refer others to me. In this way I will lose patients [RGP-4].***

***I always make efforts to prescribe a good, economical product, so that the patient can buy it and take a full course of treatment. If I prescribe a costly product of best quality, the patient will run away from me and will say this physician is very expensive, because he prescribes costly medicines [RGP-1].***

The above quotes from the rural physicians clearly show that they were well aware of the consequences in terms of patient loss if they consider the PSR's costly product. This is because they have to cure their patients' disease or ailment; therefore, they prescribe the medicines that the patient can afford. The patient's wellbeing will only be achieved when he or she completes the full course of treatment, which is only possible when the patient is able to buy the medicines prescribed. Similar to the above explanations, the urban physicians also confirmed that they definitely had RQ with PSRs but they also had to analyse each and every aspect before taking decisions on prescription, including the patient's economic conditions or product affordability. This was important in retaining their patients:

***If I prescribe the PSR's costly product, next time the patient might not come to me as an outcome. Morally I have to cure my patient but also retain him or her professionally [UGP-1].***

***Definitely the patient can switch when you prescribe a PSR's expensive medicines. This is because when a patient cannot afford, they do not say to their physician that they cannot buy this medicine to avoid embarrassment, ultimately, they silently move to somebody else [UGP-6].***

These quotes from the urban physicians also give clear impression that on ethical or moral grounds they have to ensure a patient's wellbeing. Secondly, they have to achieve patients' satisfaction by giving them economic compliance. They expressed their experiences that if they did not care about the patients' economic compliance this led to patients switching to other physicians and they cannot achieve their self-interest in patients' retention or practice viability. Their explanations also give the impression that unlike rural area patients, urban patients might afford the product but their other household financial commitments make the PSR's product unaffordable. And because they belong to the white-collar class, they switch physician without notice to avoid humiliation. Therefore, these sort of cognitive evaluations and also the presence of self-interest mechanisms engender reservations in prescribing the PSR's product. Patient retention is a very vital aspect for physicians, since their earnings depend upon the number of patients visiting them. These earnings are necessary to run a private clinic and to cover its administrative costs, as illustrated in the following quotes from both rural and urban areas physicians:

***You have to manage your clinic at the minimum level in terms of charging to retain the maximum number of patients. Because you have to maintain your system; for instance you have to pay salaries to staff. Since***

*you have to manage all this, therefore, if you provide the maximum relief to patients, it will bring you success [RGP-5].*

*This entire clinic's setup will only be sustained if you maintain patients' satisfaction. Because of this setup I am able to have paramedic staff working for me, and PSRs come to see me. If I did not have a good number of patients, I would not be able to keep my paramedic staff and no PSR would come to see me. Conversely, I would sit alone in my clinic and become frustrated psychologically. Because you will think, did I graduate to face this situation to sit in my clinic alone [UGP-2].*

These quotes give the clear impression that the physicians not only manage patient healthcare but they also act like the owner of small business enterprises in the form of private clinics. Their explanations give the idea that in order to maintain the smooth running of their businesses, they need the maximum number of patients, which can only be possible by providing maximum economic satisfaction to new patients and by retaining existing patients. As their earnings are dependent upon the number of patients' they keep (Granlund, 2009). Therefore, for the physician it becomes vital to cure the patients early within their ability to spend on the cost of the treatment. In this way the physician achieves maximum satisfaction and therefore retention of the patients, as explained by an urban area physician in the following quote, which is representative of many others (please see appendix 8, Q-21):

*I analyse each and every aspect i.e. quality and cost of the product, as I have to satisfy my patient in order to maintain a high number of patients. Therefore, being a physician I have to provide both kinds of compliance, i.e. disease recovery within economic means as my top priority [UGP-1].*

The quote above clearly signifies that physicians make their decisions rationally by considering all the disease-related and economic issues. An appropriate rationale helps physicians to achieve patients' wellbeing, satisfaction; and thus it is highly likely to increase in repeat patronage and decrease possible switch to another physician that is of equal importance for the private physicians (e.g. Lundin, 2000). Therefore, if the PSR's product is appropriate in their assessments, they will prescribe it due to the presence of RQ, as illustrated in the following quote:

*Physicians consider the patient's welfare because if the patient recovers this provides economic benefits to physician. Now in achieving this, if a PSR's product you have RQ with fits this is fine, otherwise you have to switch to an alternative product [RGP-4].*

The patient's satisfaction and trust in the physician not only can emerge from the healthcare decision of a physician against patient's response in terms of early recovery from disease; but also can be enhanced positively if a physician exhibits additional responsiveness by considering patient's financial circumstances during their prescription decision making (Gönül et al., 2001). However, physicians further explained that even if they prescribe the PSR's high price product, the prescription might be dishonoured; this aspect is examined in the following section.

## **B) PATIENTS' EDUCATIONAL STATUS AND PHYSICIANS' AWARENESS OF PHARMACIES' BEHAVIOUR**

All the rural areas physicians explained that they also had reservations when prescribing a PSR's costly product, fearing their prescription would ultimately be dishonoured when taken to a pharmacy, as illustrated in the following quote:

*Suppose, if I prescribe a PSR's costly product to a patient and when he or she approaches the pharmacy to buy it, the pharmacist can provide an alternative low price product when the patient says 'I do not have enough money' [RGP-4].*

This signifies that physicians expressed their experience about the behaviour of pharmacies in terms of developing uncertainty about whether the patient would buy the PSR's product or not. Because there is a tendency in Pakistan for pharmacy staff to sell products to patients which earn them more profit. This is illustrated in the following quote:

*The area in which I practice, the pharmacy's staff changes the prescription a hundred percent of the time. They provide the medicine to patients that generates the most profit. This is because patients are not well educated here [RGP-6].*

They further explained that patients were not well educated in the rural sales area therefore it was quite difficult for them to manage their treatment and therefore the physicians had to make extra efforts to ensure their patients were able to buy the same product they prescribed. Thus, not only the patients' non-affordability but also their educational status and pharmacies personnel's behaviour, which sometimes influence the physicians' prescription behaviour engender reservations in prescribing costly product. Moreover, physicians explained that this was a waste in terms of effort and time, when they prescribed a PSR's costly product to a patient who could not afford it:

*It is a failure when your prescription is dishonoured at the pharmacy because all your efforts and time become useless when you prescribe a costly product and there is no benefit in doing so [RGP-4].*

This signifies that physicians feel it is disrespectful to them if pharmacists change the products that a physician prescribed for a patient. The physician has to invest his time in diagnosing the patient's disease and prescribing a product that can best serve the patient's particular condition. When prescribing a costly product, physicians remain uncertain about whether the same product will be provided by the pharmacy staff; therefore, they prescribe alternative, less expensive medicine they have clinical experience of. This makes physicians confident that the patient will get the same product since the patient can afford to buy it.

However, this issue was not mentioned by the urban area physicians. This perhaps, is the result of the population in urban areas being more educated than in the rural, and more aware of the harmful consequences for their health. Therefore, they might be more conscious with respect to buy the product(s) prescribed by physicians. Moreover, it might be possible that the drug control authority manages the issue more actively in urban areas as compared to remote rural areas. Thus, not only the patients' non-affordability but also their educational status and other members in value chain (i.e. pharmacies personnel) behaviour, which sometimes influence the rural areas physicians' prescription behaviour engender

reservations in prescribing costly products. Nevertheless, all the urban and rural sales area physicians explained that they also had reservations about prescribing the PSR's costly product because patients can seek out other ways of treatment if they cannot afford the proper medical treatment.

### **C) PATIENTS' EDUCATIONAL STATUS AND ADOPTION OF DIFFERENT ROUTES OF TREATMENT**

All the rural and urban area physicians explained that they also avoid prescribing a PSR's costly product because patients sometimes adopt other routes of treatment due to non-affordability, as illustrated in following quotes:

*When patients cannot afford medical treatment they sometimes consult with a 'Hakim or Quack'. They just like to spend ten or 20 rupees and avoid buying costly medicines and ultimately they face very serious consequences. Therefore, it is better to prescribe a product that they can afford [UGP-6].*

*If I do not take care of my patients their care can become neglected. They will not want to consult with a professional physician, instead they will be more likely to consult with a Quack [RGP-1].*

This demonstrates the physicians' awareness of patients' tendencies to take healthcare assistance from Hakims or Quacks, who are not considered qualified by medical science, as an economical alternative. Hakims treat their patients with natural herbs or plants, however they have no advanced diagnostic techniques to find out the actual cause of patients' disease or ailment. Moreover, many diseases cannot be treated with natural herbs. Quacks on the other hand use modern medicines; however, they are non-qualified personnel, who have very limited knowledge of pharmaceutical products that can be used within particular disease indications. This can lead to the misuse of drugs and patients more often face very serious consequences. Similar to the above explanation, one of the rural area physicians explained another source of treatment, when a patient cannot afford the cost of medical treatment, as illustrated in the following quote:

*If I do not look after of my patients they may move to religious persons for spiritual treatment. I don't know how they are treated but my patients are not well educated and they may prefer to get their treatment in this way [RGP-2].*

This again signifies the physicians' uncertainty about the patients' disposal to have spiritual treatment. In his explanation he does not explain this; however, he pointed out that the rural areas population was not educated. This implies that physicians' were well aware that their patients' educational status was not adequate to make comparisons about the negative consequences of these routes of treatment. In the above quote, perhaps he tried to express his feelings that the majority of professionals who offer spiritual treatment do not have a good breadth of knowledge about the religion; they are professionals who treat patients just because of the income. There is no doubt Muslims believe in spiritual treatment; however, there are very few experts in this area and patients mostly fall victim of the fake ones. This therefore, leads to the patient being in a worse condition in terms of their disease or ailment and to avoid such unwanted consequences, physicians switch to less expensive alternatives.

One of the rural area physicians explained that there was no alternative but to overlook the PSR's product and to prescribe an alternative, as explained in the following quote:

*There is no doubt you have RQ with the PSR but a higher product price is a hindrance. Only possibility to prescribe the PSR's product is if his or her firm reduces the price or patients' ability to afford increases. I am helpless to increase patients' buying power and it is not in the PSR's hands to reduce the price. Therefore, the middle way is to prescribe a low price alternative, it will take few more days to cure the patient with but he or she will at least recover [RGP-4].*

This signifies that physicians can have RQ with PSRs, however its outcomes in terms of prescriptions from the physicians depends upon the patients' affordability and the price of the product that the PSR promotes. For physicians, patients' wellbeing is the critical priority and in the situations where the patient has economic constraints the physician has to prescribe something that a patient can buy to recover his or her disease or ailment. By doing so, physicians not only achieve patients' satisfaction and retention, and thus make their own practice viable, they also reduce the chances of patients' seeking other ways of treatment and mitigates the unethical behaviour of the pharmacies.

In summary the above explanations from both rural and urban area physicians confirm that they cannot always meet the objective outcomes of RQ as per PSR's expectations if he or she promotes a high price product. This is due to the intense level of competition within the physicians' practices, located nearby to each other. If the physician cares about his or her RQ with the PSR and prescribes the PSR's costly product beyond the reach of a patient, this will lead to the patient's dissatisfaction with the physician. Since, the patient might perceive the physician is quite expensive and he or she cannot afford the health care solution provided by the physician, the patient will switch to another physician. The above explanations provide the idea that physicians had full awareness of their patients' switching behaviour due to non-affordability and educational status (particularly in rural areas). Therefore, even though they had RQ with a PSR, they would prescribe less expensive alternatives to avoid potential loss of patients, not only because they switch to another physician but also to avoid patients' adoption of other routes of treatment. Therefore, they have to provide maximum patient satisfaction by curing them earlier and also by means of giving them economic compliance. This is because physicians want to ensure their self-interest through their patients' wellbeing, their retention or earnings and practice viability. In such a situation the PSR-physician RQ related underlying mechanism of reciprocity remains dormant and physician's self-interest in terms of patient wellbeing becomes more active, which leads to the physicians' prescription decision making of an alternative low price product. It is thus confirmed that physicians' *self-interest* with patients was highly prevalent mechanism due to huge competition among the physicians practicing in both rural and urban sale areas and because of the patients' adoption of other routes of treatment.

However, as explained by respondents, the self-interest in maintaining patients' wellbeing for their satisfaction, retention and practice viability was not only achieved by providing economic compliance; it also depended on the quality of a product so that the physician was able to cure the patient earlier. Therefore, similar to the findings in chapter 4, physicians

were asked, when they switched to a low price alternative, how they ensured the product's quality or efficacy to cure their patients' disease. Their explanations are examined in the following section.

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#### **5.4.3 PHYSICIANS' INTERACTION WITH OTHER FIRMS' PSRS AND THEIR EXPERIENCE OF ALTERNATIVE PRODUCTS**

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All the rural and urban area physicians explained that they had long experience of using alternative products from various firms' PSRs, who promote the same product with different brand names. Therefore they were well exposed to different alternative product prices and their efficacy, as illustrated in the following quotes:

*When you prescribe a low price product on trial basis in two to three patients, you develop your trust and satisfaction when you find recovery from patients' disease. Therefore, we prescribe alternatives on the basis of our clinical experience [RGP-2].*

*Some national companies are good enough in Pakistan. Secondly, I have been prescribing their medicines for a long-time now. For instance I know that the injection I am going to prescribe is good enough. So, all this process is fed by my clinical experience [RGP-7].*

This suggests that on finding satisfactory results in terms of patients' recovery from disease, physicians also develop their trust in lower price alternatives. Furthermore, as they gain experience of some firms producing economical products over the long term, therefore their trust is also strengthened and they can prescribe them confidently. However, they also confirmed that this is their course of action for mild to moderate infections. If the patient does not recover with a lower price alternative or a patient has a severe infection, then they switch the patient to a product they have more trust in. This is illustrated in the following quote, which is representative of many others:

*During my prescription decision making I definitely think which PSR loves me more, who interacts with me frequently but I also have my clinical experience about which brand is suitable for a patient. For example: If I prescribe 'CARICEF' would my patient be cured by it? If I know that my patient has already been suffering with the disease for the last ten days then on the basis of my investigation, I prescribe the research brand 'CEFSPAN' from the very first day. But I counsel the patient that at the moment this product is more suitable [RGP-6].*

The above quote from a rural area physician clearly indicates that during the prescription decision making process all the following mechanisms are present: PSRs' RQ related (i.e. physicians' reciprocity for the PSR): patient's medical and economic context related (i.e. patient's wellbeing, and non-affordability): and physicians' own experience of different products (i.e. physicians' clinical-experience). However, the choice between the alternative and the PSR's product was contingent to the patients' particular medical or economic conditions. This implies that the choice of the PSR's high price product will be done when necessary for the patient in terms of the patients' disease severity. However, in normal situation physician will prescribe a product that provides an economic benefit to patients. This is because they operate in an open system and patients' different economic and medical conditions demand that they keep their options open in order to achieve their self-interest in

patients' wellbeing, economic-compliance and their own practice viability. As examined above, this is important for physicians to survive within a particular patient's condition and in all, the physicians' clinical-experience plays an important role, as illustrated in the following quotes:

*After such a long-time in practice you become enabled, which gives you confidence that the product you are going to prescribe will provide efficacy to a patient [UGP-5].*

*Definitely, there is an efficacy doubt that is why I do not use franchisers and try to use MNCs and a few national firms' medicines. I try with a medicine at a reasonable price; if that cures the patient then it is fine. If not then I switch to the brand leader [RGP-6].*

This implies that physicians, based on their clinical-experience in both sales areas, prefer to prescribe an economical product first to achieve their self-interest in terms of patient's wellbeing, both medically and economically. This fulfils all their ethical, emotional and practice viability objectives. However, a PSR who promotes a high price product will only be considered for prescription if the physician feels it appropriate, i.e. when the patient does not recover. In such cases patients' wellbeing mechanism becomes more active, since physicians' self-interest in terms of practice viability is achieved when a patient recovers. However, many physicians explained that patients' non-affordability mechanism could be handled by either physician's counselling to patients or patients' own understanding of the severity of their disease.

In summary, the above explanations from both the rural and urban area physicians give the idea that due to intense competition in the Pakistani pharmaceutical industry, physicians were exposed to many alternative products because of regular contact or visits from other PSRs. Therefore, they also expressed their trust in MNCs and some of the national firms' products and relative prices because of their many years of clinical-experience. As a result they also developed relationships with the PSRs representing these firms, since these other PSRs were also providing services and visiting physicians.

Their explanations also give the impression that they develop a priority list of few PSRs for a particular product category with different brands at varying prices. By having RQ with the physicians, PSRs find a place in the physicians' priority list. Consequently, even if the product price is high, the physician looks after the PSR due to the presence of a reciprocity mechanism. However, the reciprocity mechanism becomes more active when a physician finds a feasible situation medically or when he or she has patients of sound economic means in terms of prescribing the PSR's product. This is not only because of the PSR's RQ with physician but also the physician has more trust in the PSR product's efficacy compared to lower priced alternative products, as this achieves physician's self-interest in patient's wellbeing and practice viability, when a patient comes with a severe infection. The next section provides physicians' explanations about for whom and under what conditions RQ works more effectively in terms of achieving its objective outcomes.

## **5.5 FOR WHOM AND UNDER WHAT CONDITIONS OR CONTEXTS DOES RQ WORK MORE EFFECTIVELY IN TERMS OF ACHIEVING ITS OBJECTIVE OUTCOME**

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All the rural and urban area physicians confirmed that the PSR's RQ with them worked more effectively when the PSR promotes a competitive product in term of its price and quality. That is to say, the PSR will achieve RQ's objective outcomes consistently (in terms of prescription share) when there is a quality product and its price is affordable to a majority of the patients in the context of Multan in Pakistan. This is illustrated in the following quote, which represent other rural area physicians' quotes (please see appendix 8, Q-22 and 23):

***If the PSR's product price is competitive in comparison to alternatives, my prescription frequency will increase. Therefore, the PSR will attain more benefit from RQ when he or she offers an economical, quality product [...]. Because mentally I evaluate the firm's image as well, therefore, such a PSR achieves more prescription share you can say he or she will get six out of ten prescriptions [RGP-6]?***

Similar to the above quote from rural areas physicians, the physicians from urban areas also confirmed that they prescribed the PSRs product more frequently when the PSR provides a product with both quality and economy. This is illustrated in following quote, which represents the many other quotes of similar meanings (please see appendix 8, Q-24 and 25):

***If the PSR's product price is competitive then he or she will achieve all the benefits. This is because the PSR fulfils all our social and psychological needs. He or she not only fulfils the primary criteria but also appeals to me aesthetically and therefore I will have RQ with that PSR [UGP-4].***

The quote above from physician give the impression that PSR's RQ related emotional and self-interest and reciprocity mechanisms became more active when the product price was not high. This is because the PSR fulfils all their technical, social, economic and aesthetic criteria. Moreover, because physicians have more trust in the PSR's product's efficacy, therefore they have more confidence that they will achieve their self-interest in patients' wellbeing and practice viability. Moreover, in such a situation the physicians do not feel any pressure about patients' ability to afford and therefore, the patient's non-affordability and emotional mechanisms due to sympathies for a patient remain dormant. That leads to frequent prescriptions for the PSR and the PSR achieves the objective outcomes of RQ in the form of an increase in the product's sales.

To further verify the effect of RQ and its mechanisms on the increase in prescription share or sales, physicians were also probed on how they decide on a brand for patients that offers low price and good quality when they do not have RQ with the PSR. Their responses are illustrated in the following:

***If you do not have RQ with the PSR, but he or she offers a quality and economical product, it will be prescribed where needed. This is because I have to take care of the patient's welfare [RGP-3].***

***Yes I will prescribe where it is required but not frequently as compared to the PSR with whom I have RQ. He or she will get the bulk of prescription share in the longer-term. Therefore, he or she will get the prescription share about six out of ten times [UGP-3].***

These quotes above from both the rural and urban area physicians clearly signify that the PSR will not achieve the maximum prescription share just on the basis of quality and economy of a product. However, if the physician has RQ with the PSR, he or she can achieve an increased prescription share. This implies that PSR's RQ related emotional, self-interest and reciprocity mechanisms in combination of patient's affordability and product's efficacy mechanisms assist in achieving higher prescription share and sales.

However, physicians' explanations also give the idea they have to limit their prescriptions of the PSR's product due to various other reasons. That is to say, physicians do not want to leave any perception of unethical behaviour (for instance accepting financial incentives from the PSR) for other physicians, pharmacists, PSRs and patients.

***It is against my conscience or principles to give a one hundred percent prescription share to the PSR with whom I have RQ or friendship. This is the way of those who make unethical financial arrangements with a firm or its PSR [RGP-6].***

***This is because you have to be careful, if you prescribe only the PSR's product the other people around in the market may suspect bribery [UGP-3].***

This signifies that a physician also has to take care of their own reputation as it can lead to a negative impression of the physician within the community they deal with if they only prescribe products of PSR's with whom they have RQ. This can be perceived as an unethical sort of relationship between the physician and PSR by others. Since there was tendency of unethical marketing practices by few companies to achieve maximum prescription share, as explained by physicians in above illustrations. Therefore, to avoid the repercussions of such perceptions they keep themselves under their self-imposed limits in terms of giving prescription share.

Apart from this, physicians explained that they also did not prescribe the same product every time to patients. If a physician prescribes the same product repeatedly, patients might remember the product or brand name. This could lead to them self-medicating by buying the same product from pharmacies for their own use or that of any family member with the same condition, without getting a diagnosis from the physician. As explained above, there were not strict rules and regulations or monitoring of pharmacies in both urban and rural areas. Patients were able to buy any medicine without physicians' prescriptions. Therefore, this leads to physicians' reservations and in order to provide a psychological change to patients, physicians prescribe different brands under same product category; and hence they cannot always prescribe only the PSR's product. This is illustrated in the following quote:

***You have to provide a psychological change to your patients, therefore you have to prescribe some other PSR's product. In that way you also oblige him or her [UGP-3].***

Furthermore, as physicians explained above they have more than one PSR in their priority list, and this creates an opportunity to oblige the other PSRs by dividing the rest of the prescription share between them. In that way they achieve other PSRs' commitment in order to retain relationships with them to meet their own technical and social self-interests with

other PSRs as well. However, they confirmed that they provided the higher prescription share (i.e. six out of ten prescriptions) when they had RQ with the PSR and the PSR offered a quality and economical product. Hence, the above explanations from both the rural and urban area physician of Multan confirmed that the PSR's RQ works more effectively in terms of achieving its objective outcomes i.e. an increased prescription share or sales, when he or she offers both quality and economy with a product. The next section provides the summary of the findings of chapter 5.

## 5.6 CHAPTER SUMMARY

The mechanisms verified through explanations from the sections above are outlined in table 5.1. These mechanisms can coexist; however, their activation depends upon the patient's particular context. When the PSR's product price is high he or she can only get a prescription from physicians in one of two contexts: either the patient can afford to buy the product; or when it becomes essential to prescribe due to the severity of the patient's medical condition.

*Table 5.1: Mechanisms verified from two different contexts and outcomes they produced*

Context	Mechanisms	Outcomes
Patients' Affordability and/or severe medical condition	PSR's RQ related reciprocity, Ensured product efficacy, Physician's self-interest in patients' wellbeing, Patients' non-affordability Physician's counselling of patients Physician's self-interest in practice viability	Physician's prescription for the PSR's high price product
Patients' non-Affordability And/or mild to moderate Medical conditions	PSR' RQ related reciprocity, Physician's interaction with other firms' PSRs & exposure of alternative products Physician's clinical experience Physician's self-interest in patients' wellbeing, Physician's emotional sentiments for patients, Physician's self-interest in practice viability	Physician's prescription for the alternative low price product

In the case of severe medical conditions or infections the efficacy of the PSR's product turns out to be more active since physicians trust in the PSR's product more than alternative products in order to achieve patients' wellbeing and their own self-interest in practice viability. This is also supported by the physician-PSR RQ related reciprocity mechanism; however, in such situations patients' wellbeing mechanism is more active and physicians counselling of patients to buy the PSR's costly product mitigates the effects of the non-affordability mechanism. Therefore, patients' non-affordability mechanism is present, however, it remains dormant in that particular time and space, which is shown by the turquoise blue colour in table 5.1. The PSR' RQ related reciprocity mechanism becomes more active if patients' affordability mechanism is also present. This is because these mechanisms are also supported by the ensured efficacy of the PSR's product, which helps physicians to achieve their goal of patient wellbeing and therefore physicians also achieve their self-interest in practice viability.

However, as confirmed by the physicians above, overall their patients' economic conditions are not sound, therefore this leaves less chances for the physicians to prescribe the PSR's costly product frequently because of patients' non-affordability mechanism, which was highly prevalent in both the rural and urban areas. Moreover, physicians' assessment of patients' mild to moderate infection and activation of patients' non-affordability mechanism further fosters other related mechanisms. As a result, physicians' self-interest in patients' wellbeing leads physicians to prescribe an alternative product that the patient can buy and use. The patients' wellbeing mechanism emerges because of the physicians' professional ethics; which is also supported by the activation of emotional mechanisms that have their link with physicians' humanity, empathy and sympathies for the patient's non-affordability. Therefore, the PSR-physician RQ related reciprocity mechanism is present; however, it remains dormant in such a particular time and space, which is shown by the turquoise blue colour in table 5.1.

The patients' wellbeing mechanism is also highly active because of physicians' own self-interest in patient satisfaction, retention and physicians' practice viability. In the event of non-affordability patients are not only able to switch their physician, they can also adopt alternative routes of treatment. Furthermore, pharmacies' behaviour of dishonouring physicians' prescriptions also develops physicians' reservations in considering the PSR's costly product. The presence and activation of all these mechanisms guide physicians to evaluate alternative products. Finally, the mechanisms of clinical-experience, due to physicians' exposure to alternative products and relationships with other PSRs in the priority list, also mitigate the effects of the PSR's RQ related reciprocity mechanism. Thus, the physician switches to a low price alternative that a patient can afford to buy and use so that they can ensure their self-interest in patients' wellbeing, satisfaction retention and their own practice viability.

The above findings therefore suggest that there is an inconsistent relationship between the PSR's RQ and physicians' prescription decision making of the PSR's product. This confirms that physicians cannot always meet with the objective outcomes when the PSR's product price is not competitive. These explanations also confirm that PSR's RQ related mechanism is always present but its effects depend on patients' particular economic conditions. This is because physicians are only able to prescribe the PSR's product when they find a patient with sound economic conditions or on the basis of patients' disease severity.

## 6 CONCLUSION:

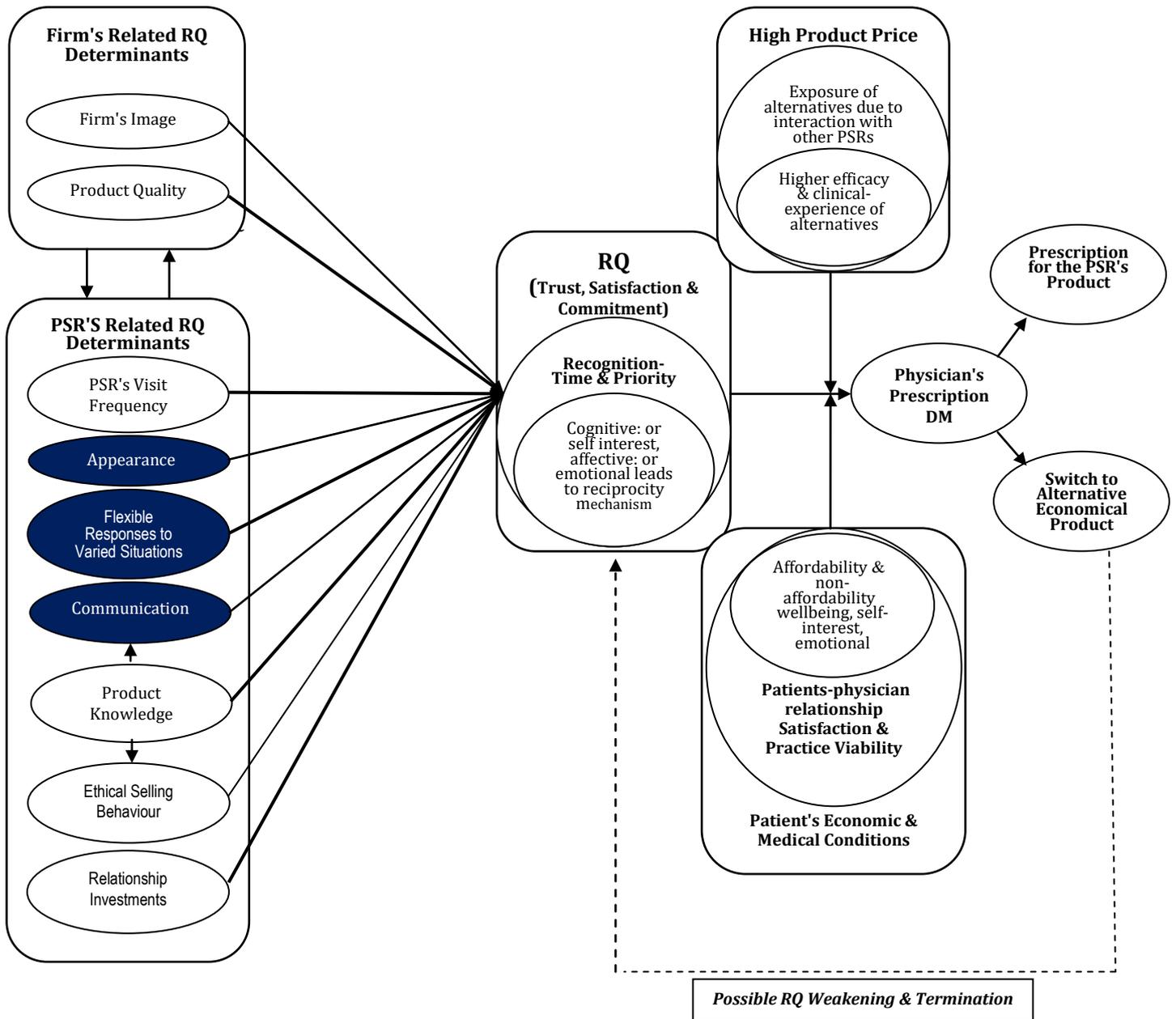
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The overall purpose of this research was to critically explore the determinants, and their associated underlying mechanisms, that contribute to a PSR-physician's RQ. Furthermore, the aim was to investigate how far product pricing (and related mechanisms) has an impact on the outcomes of RQ i.e. objective outcomes in terms of physicians' prescription decision making under patients' specific economic situation - in the context of Pakistan. In pursuit of this, the research adopted critical realism's guiding principles to shed light on the phenomenon of RQ in an open system where different uncontrolled underlying mechanisms interplay or interact with each other to either support or constrain the development of RQ, and also to achieve RQ's objective outcomes in different contexts. Because context specificity and mechanisms associated with it become essential, the research endeavours followed the guiding philosophical principles of critical realism (e.g. Danermark et al., 2002). This therefore led this research firstly to the identification of mechanisms and then verification of how these mechanisms interact to produce outcomes in terms of physician's prescription decision making within different contexts (e.g. Sayer, 1992).

In doing so, the previous two chapters, comprising the embedded case study, have provided the findings and analysis of this research based on the structure provided first by initial conceptual framework, which was drawn from literature in chapter 2; and then based on the findings of chapter 4, produced the revised conceptual framework. The revised conceptual framework (outlined below in figure 6.1) as a product of this research is indicative of the interpretations of the data generated.

The resultant revised framework was then verified later in chapter 5 by generating further data from two different contexts in order to ensure its authenticity and validity in terms of presence or stability of mechanisms identified in chapter 4. The subsequent findings of chapter 5 fully support the framework's viability or practicability in terms of an open system inquiry that can become the impetus for further research on the notion of RQ in similar, or different, research settings or contexts.

The following section presents the contribution to knowledge. The section after that discusses the research questions that drove this research in order to relate the findings accordingly, and the contribution they make to knowledge. The subsequent section then moves on to the limitations of the research. The following sections then provide the implications for practice. Finally, suggestions for future research, reflection on research approach and a few final comments are discussed.



**Figure. 6.1: Verified: 'Revised conceptual framework' using evidence from both urban and rural sale areas**

## 6.1 CONTRIBUTION TO KNOWLEDGE

One of the contributions of this research is the identification of the key determinants that contribute to PSR-physician RQ with respect to the Pakistani pharmaceutical and socio-economical context, which can also be applied in the context of other developing countries such as India, Sri Lanka and Bangladesh or where there are similar socio-economic issues and healthcare structures present. Although most of the studies on RQ in general deal with developed countries, including those conducted in the pharmaceutical context (e.g. Clark et al., 2011; Lagace et al., 1991), this research confirms many other scholars' findings that RQ determining factors are contingent on wider contextual factors (e.g. Hewett et al., 2002;

Naudé & Buttle, 2000). However, this study has revealed a further determinants, which are: PSR's flexible responses to varied situations; appearance in terms of dress code (i.e. formal business attire, which includes trousers, shirt, tie and/or full suit); and the use of English and specialised medical language as a mode of communication. Both the PSR's appropriate appearance in terms of dress code and mode of communication discussed above gives the physician a perception of similarity and that the PSR has a professional attitude, which influences the RQ between them. Therefore, these aspects might also be important to consider for the development of salesperson and customer RQ in other professional product/services selling context. These findings suggest customers are less likely to develop relationships with sellers if their attitudes, such as professionalism and work ethics, are not mutually held (Smith, 1998b). Moreover product quality, which has not been considered in previous studies on RQ in pharmaceutical selling, emerged as a vital determinant in a pharmaceutical sales context. This is because product quality in this setting has some rational and emotional properties in relation to patients' wellbeing that affects the PSR-physician's RQ, which might not be as crucial in the exchange of other product categories.

Another major contribution of this research is that it has provided a deeper understanding of RQ's objective or financial outcomes while considering the impact of contingent economic factors. Previous studies (including those conducted in a pharmaceutical context) have seen RQ objective outcomes within the stable conditions of closed systems, without taking into account when these quality relationships interact with external contingent factors. Therefore, previous researchers have predicted that the establishment of buyers-sellers' RQ will achieve objective outcomes for sellers, i.e. sales effectiveness and/or increased business share (e.g. Boles et al., 2000; Crosby et al., 1990; Huntley, 2006; Leuthesser, 1997; Palmatier et al., 2006; Palmatier, Scheer, Houston, et al., 2007; Vieira et al., 2014). However, this research indicates that RQ's objective outcomes in terms of increased sales were not consistent when the product price was high. There is no doubt that a salesperson's RQ with a customer influences the latter's buying decision making due to the presence of self-interest, emotional and reciprocity mechanisms. However, the actual purchasing decision, which leads to sales increase, also depends on the cooperative activation of other contingent mechanisms related to the overall economic conditions of customers. That is to say, the consistent achievement of objective outcomes or sales increase is *only* possible when the product price is affordable to customers, which mitigates the effects of these other confounding mechanisms. The overall economic conditions and the price of the product in terms of achieving RQ's objective outcomes should not be under-estimated.

Therefore, it can be anticipated that RQ's objective outcomes cannot be seen within the stable environment of a closed system without taking into account the other confounding factors or mechanisms significant to the particular research context (i.e. firm-to-firm, firm-to-consumer, and interpersonal selling context). Particularly, in selling products or services, the effectiveness of RQ cannot be understood by just predicting that RQ between a salesperson and customer will lead to its objective (i.e. sales increase) outcomes. For a comprehensive or better understanding and implementation, it is necessary to investigate

how far other mechanisms related to particular research contexts support or constrain the objective outcomes of RQ between a salesperson and customer.

Furthermore, the majority of previous studies (particularly in pharmaceutical context) have seen the development of a dyadic RQ between buyers-sellers (Odongo et al., 2016), when observing its objective outcomes. However, Holmlund (2001) argued that buyers' purchase decision making can also be influenced by the interaction of other relationships in the value chain; therefore these aspects should also be taken into account in order to verify the effectiveness of RQ in terms of achieving its objective outcomes (e.g. Hennig-Thurau & Klee, 1997). This research also fulfils this call in the RQ literature by considering the 'PSR-physician-patient' triadic relationships, which confirmed that PSR-physician's RQ outcomes are contingent on patient's relationship with physician. Patients' particular medical and economic conditions cannot affect the development of RQ; however, these factors influenced the physicians' prescription decision making and thus PSR's prescriptions as an objective outcome of RQ. Moreover, physician's prescription decision making as an objective outcome of PSR-physician RQ is not only influenced by the patient-physician relationships but can also be affected by the physician's awareness of other value chain members' behaviour, such as pharmacy personnel's ability to dishonour the physician's prescription. Therefore, along with the identification of contextual mechanisms discussed above, the interaction of other relationships in the value chain should also be taken into account in order to determine the effectiveness of RQ in achieving its objective outcomes in similar or different contexts of firm-to-firm and firm-to-consumer RQ, subjected to study.

Finally, this research has also contributed to knowledge because it went beyond the identification of what determinants are needed but also highlighted why these determinants are required, how they help to develop RQ and what outcomes can be achieved. That is to say, the application of critical realism's principles allowed this research to explore the underlying processes or mechanisms associated to determinants that influence RQ. This research confirmed that all the RQ determinants engender the cognitive, or self-interest and emotional sentiments that act as a mechanisms, which help a PSR to gain the physician's trust, satisfaction and commitment that comprise RQ. These mechanisms further foster the reciprocity mechanism that influences RQ's subjective and objective outcomes. Furthermore, by identifying the other objects of the pharmaceutical selling structure, the relationships between them, causal forces they possess, and overall conditions in which they operate, this research discovered several additional mechanisms that either support or constrain RQ's related mechanisms to achieve its objective outcomes. Previous research on RQ has just focused on the interrelationship or constant conjunction between the variables by simply measuring their effects on each other in stable conditions. In this respect, this research has advanced existing knowledge of RQ one step further by providing a way to map out deep processes or underlying mechanisms, which is important for better understanding, and implementation of RQ in a specific context, to assist achieving it in its expected objective outcomes. This has the potential to reduce the theory and practice gap, a common criticism raised by scholars concerning the profitable application of relationship marketing scholarship (Ashley et al., 2011).

To further explain how this research made contributions to knowledge, the following section discusses the research questions that drove this research in order to relate the findings and contribution to knowledge accordingly.

## **6.2 ASSESSMENT OF FINDINGS WITH RESPECT TO RESEARCH QUESTIONS:**

The following subsections of this section start by evaluating, or comparing, the findings against the initial research questions. These are:

- 1) What determinants are needed and why are they required to build up RQ between PSRs and physicians in a Pakistani pharmaceutical context?
- 2A) How does PSR-Physician RQ (i.e. trust, satisfaction and commitment) interact with the product price in relation to patient's economic status?
- 2B) What are the outcomes of this interaction in terms of physicians' prescription decision making and tendencies in their choice of pharmaceutical products?

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### **6.2.1 RESEARCH QUESTION 1**

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In general, all the interviewees (including those in both phase one and two of data generation) in this research confirmed the RQ determinants that constitute the revised conceptual framework outlined above in figure 4.4 (see p. 137). The respondents explained that both firm-related RQ determinants (i.e. PSR's firm image and product quality) are important to developing PSR-physician RQ in the Pakistani pharmaceutical context. Similarly, respondents confirmed that a few PSR related determinants (i.e. PSR's visit frequency, appearance, communication, product knowledge or expertise, flexible responses to varied situations, ethical selling behaviour, and relationship investments) were also necessary for PSRs to develop RQ with physicians.

However, some of these findings expand the scope of previous studies on RQ. For instance, product quality, which has not been considered in previous studies on RQ in pharmaceutical selling, appears to be a vital determinant. This is because product quality in this setting has some rational and emotional mechanisms in relation to patients' wellbeing that affects the PSR-physician's RQ, which might not be as crucial in the exchange of other products or service i.e. other than medicines. Therefore, product quality can be considered as a vital RQ determinant in the context of other developed and particularly in developing countries, where physicians' have less trust in the quality control mechanisms of medicine manufacturing. Moreover, the importance of product quality in RQ development efforts should not also be overlooked in other research settings, where buyers evaluate their relationship with sellers through both rationally and emotionally driven mechanisms with respect to the performance of the product exchanged. Therefore, quality not only influences the image of the firm that produces it but also the image of the salesperson who represents it in terms of customer's overall trust, satisfaction and commitment, which is important for the development of RQ. As a result, customers' judgements on RQ will be made based on the

quality of customer/salesperson interaction, product or service quality may also be influential (e.g. Bejou et al., 1998).

Findings suggest that an appropriate visit frequency (i.e. at least fortnightly or if possible, weekly) is required to fulfil the physician's technical, social and psychological needs, which is consistent with the literature (e.g. Crosby et al., 1990; Hennig-Thurau & Klee, 1997; Lagace et al., 1991). However, this research also suggests that an appropriate visit frequency by the PSRs discussed above is also vital in order to make it possible for physicians to memorize their product names, which might also be a case in other developing countries or where many products with different names are available under one product category. This could also be true for other research contexts where the salesperson does not need any prior appointment to visit a customer and frequent interaction between salespersons and the customer is required. Similarly, study participants confirmed PSR's flexible responses to varied situations as one of the RQ determinants primarily because of context specificity. While it is the case that in Pakistan physicians have to see patients and PSRs simultaneously, such practices might also be present in some other developing countries or other research contexts, this requires extra care from PSRs in terms of their flexibility in handling situations during interactions. Conversely, this might not be the case in developed countries due to the presence of different rules, practices or structures, which might not allow salespeople to interact with physicians either frequently or in the presence of patients (e.g. in the UK, PSRs follow strict rules and practices developed by the NHS).

Furthermore, a PSR's appearance in terms of an appropriate dress code (i.e. formal business attire, which includes trousers, shirt, tie and/or full suit) has never been considered exclusively as a RQ determinant in previous studies; however, in this study physicians considered dress code to be a part of the salesperson's similarity to them. This is a novel contribution because previous studies have identified other characteristics by which customers relate to salespeople, including age, attitude and beliefs, which influence the RQ between them (e.g. Boles et al., 2000; Crosby et al., 1990; Smith, 1998b). Nevertheless, the findings of this research suggest that an appropriately dressed PSR has a significant role in the development of RQ with physicians. Likewise, communication has been considered in literature as a RQ determinant as a result of its openness (e.g. Smith, 1998b) and content clarity (e.g. Parsons, 2002). Furthermore, in a recent investigation conducted in Malaysia in the banking industry Balaji et al. (2017) found that service providers' use of second (or non-native) language during interaction leads to less responsiveness from customers and prevented RQ development between them. However, participants in this study emphasised the opposite; they stated that skills in English together with specialised or technical medical language were crucial as a mode of communication. In Pakistan it is believed that more educated people communicate in the English language. Due to a low education level in general, the majority of the population, including the patients, communicate in the local native languages. Physicians occupy an elevated position in the social order, where it is believed that physicians are more educated than those below them, including their patients. Because PSRs normally make their sales call to the physician in the patients' presence, in order to sustain or maintain a perception of the high social status of the physician, it is

advantageous for the PSRs to communicate using English. Apart from the internal or psychological level of need satisfaction, an appropriate use of communication also fulfils the physician's professional needs. The PSR's use of English together with specialised or technical medical language fulfil the physician's assessment of similarity with the PSR as a professional. Physicians take more interest in the interaction when the PSR exchanges information using professional medical language. Otherwise, the PSR will be perceived as a less credible source of information (e.g. Lagace et al., 1991), which leads to the physician being unresponsive in the information exchange. This will certainly lead to a lack of interest in the development of the relationship with the PSR, or even no relationship. This implies that development of relationships depends not only on the quality of the information exchanged, but also *how* it was exchanged (e.g. Parsons, 2002). Thus, it is imperative to communicate with the physicians not only in English, but also using their own professional medical terminologies. Both salesperson's appearance in terms of dress and mode of communication (including language) might be important to consider as RQ determinants in similar, or some other professional, selling contexts of developing countries such as India, Sri Lanka, Bangladesh and other contexts similar to Pakistan. This is because of the socio-cultural similarity physicians feel towards PSRs in terms of wearing similar dress and using a language associated with the medical profession. In most of the developed world such issues might not appear, as the official dress code of salespeople is a suit and they tend to speak English if they do not share a mother tongue. However, in line with literature (e.g. Lagace et al., 1991), the findings of this research also suggest that a good breadth of product knowledge helps salespeople to use technical language, which coupled with English usage, facilitates their RQ with customers.

Nonetheless, all the respondents who participated in phase one and two of the interviews proposed all the identified determinants to be crucial in the development of the physician's trust, satisfaction, commitment and hence RQ with the PSR in the context of Pakistan. Consistent with RQ literature, their explanations indicate that trust, satisfaction and commitment, although distinct, are interrelated with each other (Clark et al., 2011; Mullins et al., 2014; Smith, 1998b). Moreover, similar to the literature on trust and commitment, the findings also confirmed that trust can be of two different forms i.e. cognitive and affective trust (e.g. Arnott et al., 2007; Johnson & Grayson, 2005; McAllister, 1995). Commitment can also be of two different forms, i.e. calculative and affective commitment (e.g. Kumar et al., 1994). Their development depends upon the activation of many mechanisms at a time, which are linked with the RQ determinants. In that sense, this research has unearthed that these determinants engender some underlying mechanisms, which helps a PSR to develop RQ with physicians.

Chapter 4 highlights throughout that the most significant mechanisms of RQ were self-interest (i.e. associated with physician's professional orientation in terms of his or her technical and economic needs). The professional needs to have a relationship with the patient's wellbeing and the patient's economic needs were associated with the physician's practice viability in terms of patient retention and physician's earnings. Physicians developed cognitive trust, satisfaction and calculative commitment through the activation of

self-interest mechanisms. They also developed satisfaction, affective trust, and commitment through emotional mechanisms; which were linked with the physician's sentiments, and which emerged psychologically through the PSR's efforts to ensure physician's self-interests and also when the PSR fulfilled the physician's social needs through regular contact. This is also consistent with the literature, where Smith (2011, p. 79) also confirmed that for any trust relationship, "both self-interest and emotional mechanisms are simultaneously coercive and indeed, the simultaneous cooperation of these mechanisms is often necessary". Similarly, commitment is also considered by literature to be a combination of both rational self-interest and the evaluation of the emotional benefits of a relationship by customers (e.g. Hennig-Thurau & Klee, 1997). Therefore, respondents further confirmed that these self-interest and emotional mechanisms engender a physician's mechanism of reciprocity, which led to further expected positive RQ outcomes for the PSR. These could include subjective or behavioural and objective or actual outcomes of RQ in terms of an increased prescription share and sales.

Thus, for the development of PSR-physician RQ, it can be concluded that both self-interest and emotional mechanisms might be relevant in similar contexts such as other developing countries or where a physician's earning depends upon the number of patients, which itself depends on patients' satisfaction that emerges through their early recovery and wellbeing. Since it is evident that these mechanisms influence the customer's reciprocity mechanism for the salesperson at most. Therefore, the RQ determinants that can influence or trigger these mechanisms in a range of sales contexts need to be identified in order to translate RQ into tangible sales benefits or to achieve its objective outcomes.

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### **6.2.2 RESEARCH QUESTION 2A**

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Nevertheless, findings further revealed the subjective or behavioural outcomes were stable due to PSR-physician RQ related (self-interest, emotional and reciprocity) mechanisms. However, the objective or actual outcomes in terms of physician's prescription decision making that leads to increase in sales was not consistent, when the PSR's product price was too high for patients. This is because of the overall poor economic conditions of patients in the Multan sales areas in Pakistan. Chapter five highlights that physicians who are practicing for more than ten years in both these areas are fully aware of patients' limited ability to afford their healthcare related services. This leads to physicians' reservations when considering a PSR's product at a high price due to presence of the patient's non-affordability mechanism.

These reservations to prescribe the PSR's high priced product emerged due to the presence of strong patient-physician relationships. Therefore, physicians' hold a more favourable attitude towards their patients (e.g. Lundin, 2000). They might consider their RQ with PSR while making prescription decisions; but not at the cost of their patient's wellbeing, because they fully understood the notion of conflict of interest and their professional norms (Chimonas et al., 2007). If a physician fails to cure a patient quickly within his/her budget, there is a potential risk of the patient's withdrawal and shift to another physician. Thus,

physicians' professional ethics, and physicians' professional relationship with patients in term of their own practice viability, came to the fore during physicians' prescription decision making. Physicians further explained their experience of the behaviour of pharmacies, as when prescribing a costly product, physicians remain uncertain about whether the same product will be provided by the pharmacy staff. Physicians also identified a tendency in Pakistan for pharmacy staff to sell products to patients which earn them more profit, particularly in rural areas. Moreover, physicians also confirmed that they avoided prescribing a PSR's costly product because patients sometimes adopt other routes of treatment (e.g. Hakims, Quacks and religious spiritual treatment) due to non-affordability. Respondents also confirmed that physicians also develop emotional sentiments that were linked with their sentiments of humanity, sympathy and empathy as agents of patients. These sentiments emerged because of the serious consequences if the patient did not receive the proper medication due to his or her non-affordability. All these stated factors act as mechanisms and interact with PSR-physician RQ related underlying mechanism of reciprocity. In such a situation the PSR-physician RQ related underlying mechanism of reciprocity, although present, remains dormant and physician's self-interest in terms of patient wellbeing becomes more active, which leads to physicians' reservations, as well as unwillingness to consider the PSR's costly product.

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### **6.2.3 RESEARCH QUESTION 2B**

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Therefore, if a PSR promotes a high price product, a physician may feel unable to meet with the objective outcomes of RQ as per PSR's expectations, due to constraints such as the economic status of the patient they are prescribing for. The different economic and medical contexts of patients also produce different mechanisms that interact with the PSR's RQ related mechanisms to determine physician's actual prescription decision making.

If the patient cannot afford the PSR's product, the physician switches to an alternative, more economical product in order to achieve patient's wellbeing within the patient's budget. In this situation PSR's RQ related reciprocity mechanism remains dormant; however, physicians' clinical-experience, which also act as a mechanism, becomes more active and facilitates their choice of alternative products. Respondents of this study explained that the physicians were exposed to many alternative products from many different firms PSRs' through regular interactions. Findings also revealed that physicians' had trust and satisfaction with a few firms' (i.e. multinational and top ten national firms) products and their PSRs' services. Physicians confirmed that they had long-term clinical-experience of using the products of these PSRs, therefore, they were able to make their choices of products according to patients' economic and medical conditions. In this way they achieve patient's wellbeing (i.e. linked with physicians' professional ethics and with their emotional sentiments) by providing them economic compliance. Furthermore, they were able to achieve their self-interest in terms of patient satisfaction, their retention and physicians' own practice viability by mitigating the patients' potential switch to other physicians, adoption of other routes of treatment and unethical behaviour of pharmacies (e.g. dishonouring of physicians' prescription that is changing the physician's prescribed medicine with a low price alternative product). Therefore, simultaneous

cooperation and activation of all these factors and their associated mechanisms caused a change in physicians' behaviour, which led to physicians' prescription of alternative, more economical products. All these mechanisms, with their order effects, are outlined below in table 6.1, where the active mechanisms are highlighted in black; however, the dormant mechanisms in a particular time and place are shown with turquoise blue colour.

***Table 6.1 Contexts, mechanisms, their interaction and outcomes***

<b>Context</b>	<b>Mechanisms</b>	<b>Outcomes</b>
PSR's high product price & patients' poor economic conditions and/or mild to moderate medical conditions	<p>PSR' RQ Related Reciprocity [dormant mechanism]</p> <p>Patients' non-Affordability</p> <p>↓</p> <p>Physician's self-interest in Patients' wellbeing, Physician's emotional sentiments for patients, Physician's self-interest in practice viability</p> <p>↓</p> <p>Physician's-clinical experience</p>	Physician's prescription for the alternative low price product
PSR's high product price & patients' sound economic conditions and/or severe medical condition	<p>Patients' non-affordability [dormant mechanism]</p> <p>Patients' Affordability</p> <p>↓</p> <p>Physician's self-interest in Patients' wellbeing, Physician's counselling of Patients, Physician's self-interest in practice viability</p> <p>↓</p> <p>PSR's RQ Related Reciprocity, Ensured Product efficacy,</p>	Physician's prescription for the PSR's high price product

However, as highlighted in table 6.1, when the patient's economic conditions were sound or when his or her medical condition was severe, the PSR with a costly product got a prescription from the physician. In such a situation, PSR's RQ related reciprocity mechanism became more active if patients' affordability mechanism was also present. This is because these mechanisms were also supported by the ensured efficacy of the PSR's products, which helps physicians to achieve their goal of patients early wellbeing and therefore physicians also achieve their self-interest in practice viability. In addition, physicians also want to continue their relationships with PSRs, which is only possible if physicians reciprocate in terms of prescription share as a result of all the PSR's efforts to develop and maintain RQ with physicians. If physicians do not provide the PSRs an appropriate prescription share (ideally 50% in a particular product category), it leads to the weakening of RQ and ultimately its termination. However, as findings revealed, the overall economic conditions of both rural and urban area patients' were not sound, therefore this leaves less chance for the physicians to prescribe PSRs' costly products frequently because of patients' non-affordability mechanism. Nonetheless, respondents confirmed that they would regularly prescribe the products of PSRs with whom they had RQ, if the price of the product was competitive at similar levels of quality. In this situation, PSR-physician RQ related emotional, self-interest and reciprocity mechanisms in combination of patient's affordability and product's efficacy mechanisms helped in achieving more prescription share and sales.

In the course of this research, it appeared that overall economic conditions had a great impact on the objective or financial outcomes of RQ. These findings therefore suggest that RQ expected objective (or financial) outcomes are not always consistent, even though the PSR-physician RQ related reciprocity mechanism is always present during physicians' prescription decision making. As a result, not only RQ's determining factors but also its outcomes are contingent on wider contextual factors (Hewett et al., 2002; Naudé & Buttle, 2000) as in an open rather than a closed system. These findings might also be relevant to other developing countries such as India, Sri Lanka and Bangladesh, or where similar socio-economic issues and healthcare structures are present. Moreover, unlike developing countries, developed countries might have some different arrangements for the pharmaceutical sales structure. For example, in the UK economically deprived patients can be supported by the NHS and in US or other developed countries the cost of the treatment of majority of patients might be paid by insurance firms. However, both the NHS in UK and insurance firms in US, or health systems in other parts of the western world might have their own structures and mechanisms, which should be identified. This is important because they can also interact with the PSR-physician RQ related reciprocity mechanism due to higher product price and influence its objective outcomes in terms of physicians' prescription decision making. Therefore, the dimensions of both the salespeople/customer relationship and the customer/consumer relationship need to be considered in conjunction, not in isolation, when seeking the development of the RQ phenomenon, because the issues of each relationship are interdependent and represent vital aspects of the business exchange relationship.

Moreover, the findings of this study reveal that the sales relationship can include even more layers. For example, in addition to the relationship between PSR and physician on the one hand, and physician and patient on the other, the physician and patient also have the intermediary in the form of the pharmacist. The pharmacist can make choices that may have an effect on outcomes; for example, physician decision making or patient satisfaction. As a result, the tangible financial benefits of RQ can not only be affected by the overall economic conditions but also by other members of value chain (Holmlund, 2001, 2008). In this respect the earlier assumptions by Fichman and Goodman (1996) hold true, that a better understanding of RQ, and its effectiveness in buyer-seller relationships, requires the analyses of contextual factors that structure the exchange process. Therefore, in seeking to ensure the objective outcomes of RQ it is imperative to consider the specific sales structure (i.e. its objects and relationship between them and causal powers they possess). It is also necessary to consider overall conditions holistically to understand the range of interacting mechanisms that could either support or constrain the effectiveness of customer/salespeople RQ. RQ works more effectively in terms of achieving its objective (or positive sales) outcomes in a context where overall economic conditions and product price related mechanisms support salespeople-customers' RQ, contingent on other objects in the value chain.

In spatial-temporal terms the findings of this study are context specific – they pertain to a snapshot of Pakistan at a particular time and place. If economic conditions in Pakistan were

to change, or the healthcare system were to be reformed, it is likely that the effects of the mechanisms (related to patients' economic condition) driving prescription decision making would change, or at least change in the relationship to each other. Moreover, individual cases of a relationship between a physician and a patient might change over the course of their treatment. For example, the physician-PSR RQ (and related mechanisms) might be the determining factor in the decision taken; however, if the patient's condition worsened or their economic status changed, other mechanisms might become more important and come to dominate the prescription decision. What is clear is that according to the study findings, at the current time and in the study context of Multan, Pakistan, in aggregate the mechanisms dominating the physician's relationship with the patient are more influential than those with the PSR, and this is likely to persist as long as Pakistan's healthcare system remains as it is.

### **6.3 LIMITATIONS OF THE RESEARCH**

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The findings of this research should be considered in the light of following limitations. Although, generalizability and representativeness is not of concern to the qualitative research, however from a critical realist point of view the context of research is of most importance. Therefore, one of the limitations of this research concerns participant selection (i.e. PSMs and general physicians), which was taken only from city of Multan in Pakistan. It is highly possible that the economic, cultural conditions and working patterns may have differed from other potential settings, particularly of developed countries. In addition, the findings may not be fully transferred (with respect to patients' economic conditions) to consultant physicians or surgeons, who deal with more serious conditioned patients i.e. with serious illnesses as compared to general physicians.

The second limitation concerns the participants of this research – who were all male. It is highly possible that female physicians or PSMs have different perceptions on the notion of RQ and therefore some different findings may have been achieved. This may limit the transferability of this study to similar or other sales contexts with a more mixed gender balance.

The third limitation is concerned with the data generated from the physicians. Although, the average time of the contact with physicians lasted approximately about 43 minutes; however, they have been relatively brief compared to PSMs and therefore the focus was placed on semi-structured interview questions to cover the most prevalent issues related to the both initial and then revised conceptual frameworks. Therefore, this perhaps has limited the findings with regards to uncovering some of unexpected topics and associated mechanisms.

Finally, as critical realism focuses on extended layers of reality, the data was therefore analysed carefully by moving from the empirical to the actual and to the real domain, by verifying data based on the principles that underpin critical realism (please see section 3.9.3). However, as there were few concrete empirical examples in the literature to follow, therefore the research process might be different from other researchers following critical

realism's guiding principles. For example, the coding process adopted for the raw data was valid for this study (please see section 3.9.2), but given the nature of qualitative data and the range of analytical tools available to the critical realist it may not be directly transferrable to other studies.

Nevertheless, the limitations discussed above aside, this research has extrapolated the discovery of insightful factors that are necessary in order to know the reality of the RQ phenomenon and its objective outcomes in an open system. The verified revised conceptual framework as a product of this research offers impetus for further research on the notion of RQ in similar, or indeed different, research contexts as the verified revised conceptual framework is comprehensive in the sense that has included not only the important factors, their interrelationships but also the mechanisms they engendered, which interact with each other in particular time and space to produce certain RQ outcomes.

## **6.4 IMPLICATIONS AND SUGGESTIONS FOR PRACTICE**

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The research is also of value as studies on the RQ phenomenon in the context of pharmaceutical selling are rare (Clark et al., 2011; Lagace et al., 1991) and it contributes to practice in general and particularly for Pakistan's pharmaceutical industry; as no research has been undertaken in this context to date. The following subsections offer the practical implications from this research first for management and then for PSRs.

### **6.4.1 PRACTICAL IMPLICATIONS AND SUGGESTIONS FOR MANAGEMENT**

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This research indicates many practical implications for management. Firstly, management must focus on the recruitment and training of their PSRs. Management should develop the recruitment and training policies by setting up the required criteria, which helps to develop RQ with physicians. Findings of this research revealed that physicians were highly likely to develop RQ with PSRs who could communicate not only in English but also using the appropriate medical vocabulary. This implies that management should setup criteria of hiring and hire PSRs who have an academic background in science subjects, such as pharmacists or those who know about the human anatomy. Also, those who have been more exposed to English language during their academic qualifications. Furthermore, they should develop an intensive training program to focus on the training of their PSRs with respect to products they have to promote in order to communicate accurate product knowledge for particular disease areas. Furthermore, there is also need for PSRs to be trained; for example, how to behave flexibly during their sales calls. Management should arrange some workshops for PSRs, where different physicians, in chamber situation handling sessions, can help them to improve their skills in dealing with these different real-time situations flexibly. Management should also develop a set of codes of ethics, which guide their PSRs to avoid exaggerating their products' benefits, rather they should themselves inform physicians about the side effects and contra-indications of their products. Management should also make sure that their PSRs have full awareness of their firms' core code of ethics to avoid making false commitments when physicians may demand personalized services. Finally,

management should decide on an appropriate dress code (i.e. formal business attire, which includes trousers, shirt, tie and/or full suit) and also keep checks on PSRs dress and overall physical appearance. This can also be done by either arranging some exclusive training sessions on appearance improvements or by random checks during their fieldwork. By setting up both recruitment and training criteria, management can create a sales force that can achieve their firms' objective of longer-term quality relationships with physicians.

Management should also make sure of an appropriate use of their companies' services. The generalized services, for example samples and CMEs, can be used in the earlier stage of relationship development with physician. This is because physicians require these services early on for product trials and they might need some more product related information in order to develop their trust and satisfaction with the product. However, this research indicates that once physicians' trust and satisfaction has been established, product samples and CMEs do not have great impact, and that personalized services (such as clinical equipment gifts or family dinners, foreign academic scholarships etc.) have a greater influence on maintaining RQ in the later stages. Samples or other generalized services can be supplied when physicians request them for patients or for their own personal use. In this way, management can use or allocate firms' resources cost effectively by considering the particular need of individual physicians at a particular stage of a relationship with them.

This research also indicates that firms' image development is essential to gain physicians overall trust and satisfaction. This is particularly important for relatively new firms. Management of these firms can arrange production plant visits for physicians, where they can provide necessary information on the manufacturing techniques of drugs for quality control and the sources of raw materials they use.

One of the major findings of this research indicates that overall economic conditions have a large influence on physicians' prescription decision making; therefore, for management setting up a competitive price for product in terms of achieving RQ objective outcomes is crucial. This implies a balance between both the relationship marketing approach to develop RQ mentioned above, and a traditional marketing mix in terms of setting up a competitive price through cost leadership. Both of these aspects are important for management in order to achieve firms' financial core objectives under the current intense competition within the Pakistani pharmaceutical industry. Lowering the product price or total dependence on the quality of relationships are not enough to achieve handsome financial returns. This requires a hybrid approach from management in terms of focusing on both the cost structures and also RQ development between the PSRs and physicians. The findings revealed that PSRs' RQ with physicians was able to mitigate a slight price difference. However, if the price was too high, this mitigated the effects of PSRs' and physicians RQ and consequently physicians may prescribe an alternative, more economical product. This aspect is of importance for the management of multinational firms, who have greater acceptance in terms of their image, products' quality and thus relationships with their PSRs. However, their product prices are relatively high, which creates a barrier for physicians in prescribing their products.

Therefore, the overall patients' economic conditions, pricing of products and RQ with physicians in terms of achieving increased sales outcomes should not be neglected.

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#### **6.4.2 PRACTICAL IMPLICATIONS AND SUGGESTIONS FOR PSRS**

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Although the management should provide training opportunities for their PSRs through continuous professional development, PSRs' development as managers of their own sales territories depends more on their own motivation and interests. This research indicates that there is no doubt that PSRs' firms' image and product quality influence the development of RQ. However, PSRs' own conduct during their sales calls is also critical in capitalizing on these firm-related advantages. In this respect, they should identify an appropriate visit frequency for individual physicians according to their particular needs and wants (at least fortnightly or if possible, weekly) by adopting physicians' set criteria in terms of visiting days and time. Furthermore, to fulfil their technical or professional needs in terms of exchange of product related information PSRs should improve their product and related disease knowledge. However, they should also judge the physicians' situations and avoid over detailing product information if physicians are busy dealing with their patients. In this regard PSRs can request a special appointment, i.e. relatively free time, for detailed discussions on all relevant points including adverse reactions, contra-indications and dosage schedules. PSRs should improve their English communication skills and try to emphasise medical language terminologies in their communications. Moreover, PSRs should not take for granted their dress code, since the findings of this research revealed that PSRs dress code has significant influence in the development of quality relationships with physicians. This gives the idea to physicians that the PSR is knowledgeable person and an expert of his or her products or services. Last, but not least, PSRs should avoid false promises with respect to provide any of services that are not the part of their firms' policies. By following all these above mentioned factors, PSRs highly likely to develop RQ with physicians.

However, as PSRs have no control on the prices of their products, therefore they should allocate or target their products by segmenting physicians according to their patients' economic class as managers of their sales territories. That is to say PSRs should target their high price product for the physicians who deal with the patients' of sound economic class; or PSRs can take commitment from the physicians by emphasizing to prescribe their high price to affording patients. Since this research indicates that physicians prescribe the high price products to those patients who can afford them when they have RQ with PSRs. In this way PSRs can better achieve the sales outcomes as a result of their RQ with physicians.

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#### **6.5 SUGGESTIONS FOR FUTURE RESEARCH**

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This research offered an open system inquiry that may become the impetus for further research on the notion of RQ in the contexts of developed countries (e.g. UK and US) by identifying the different contextual contingencies and their impacts on the overall effectiveness of RQ in achieving its objective outcomes.

Particularly, researchers in critical pharmaceutical studies may be inspired to further explore role of PSRs-physicians' RQ in achieving its objective outcomes under the setting of consultant physicians, surgeons who deals with more seriously ill patients.

One of the interesting and challenging topics worthy of investigation might be the impact of unethical marketing practices by some firms' PSRs on the PSRs-physicians' RQ in terms of its objective outcomes i.e. physicians' prescription decision making in the context of developing countries such as Pakistan.

Another, interesting topic might be the use of discount to individual physician as one of the RQ determinants to develop RQ due to increasing trend of physicians' owned pharmacies particularly in Pakistan. This might mitigate the overall impact of a product's high price to achieve RQ's objective outcomes.

## **6.6 FINAL REMARKS**

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This research followed the guiding principles of critical realism, which enables it to investigate the notion of RQ and its overall effectiveness in an open system. However, as critical realism ontology is not easy to apply (Ryan et al., 2012) this also posed some challenges for me. This is mainly because of the lack of critical realism based empirical studies in the literature in general and on the notion of RQ in particular to inform the research process. Therefore, it required considerable effort and innovativeness as a researcher in its deployment. However, my motivation to explore the 'reality' of the PSR-physician relationship and its effect on prescription decision making persuaded me that I would not find explanations of this issue from another quantitative study that correlated variables. I determined that qualitative data would be necessary to investigate this social phenomenon thoroughly, and this meant I needed an ontological position from which to view the data I would generate. During my reading around research philosophy I compared approaches to what I was trying to achieve and determined that critical realism offered me the best chance of achieving my research aim. Indeed, on first reading about critical realism's approach to reality, I felt that it explained how I was already thinking about the issues I had encountered in my work as a PSR, and offered a means to explore the conditions of PSR-physician interaction in particular and relationship quality in the pharmaceutical industry in an in-depth and useful manner. Therefore, this helped me as a researcher to explore critically not only PSR-physician RQ at deeper level in terms of its associated mechanisms, but also the other contextual mechanisms that either support or mitigate its influence. Therefore, this facilitated me to evaluate PSR-physician RQ, that is its possibilities, deficiencies, and limitations, and provide a fresh insight in different conditions or contexts. Although this fresh insight is context specific, nevertheless it has contributed to the existing RQ knowledge in terms of underlying causes or mechanisms, which was not possible by adopting the dominant research approach in studying RQ (Smith, 1998b; Wray et al., 1994).

This research has also enhanced my abilities as a practitioner on how a PSR can practically achieve the return on their RQ with a physician by minimizing the effects of countervailing

mechanisms in terms of achieving objective or increased sales outcomes. This is because, after generating the necessary knowledge on pharmaceutical selling structure's objects, causal forces, and context mechanisms, I am now able to estimate the driving forces behind physician's actions regarding their prescription decision making. Practically, the research has convinced me that while RQ is valuable to a PSR-physician relationship, its effects are subsumed by other, more influential factors in certain circumstances. Therefore, this has increased my consultative abilities in terms of designing relationship marketing activities in order to develop PSR-physician's RQ, and its contribution to achieving a firm's core objectives of increased prescription share from physicians and thus increased product sales. Furthermore, this insight could also affect the planning of Pakistani pharmaceutical firms seeking to maximise the effectiveness of RQ between their sales force and physicians.

## 7 APPENDICES:

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### Appendix-1

<p style="text-align: center;"><b>Participant information on data generation and INFORMED CONSENT</b></p>
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Copy for Mr.

Dear Sir

My name is Sohail Mahmood Khan. I am currently a doctoral student at University of Gloucestershire UK and conducting a research as a part of my doctoral thesis on the relationship marketing practices applied in Pakistani pharmaceutical Industry. This is because the Pakistani pharmaceutical market is a highly competitive in a sense that more than 600 license companies are operating and promoting almost same original and generic brands on varying prices. This means that physicians have more options to choose among the alternatives brands to prescribe their patients. Therefore pharmaceutical managers promote more relationship selling efforts to the pharmaceutical sales representative for competitive advantage and to achieve maximum sales outcomes. The recent research on relationship marketing in western countries identified 'relationship quality' (RQ) as a central construct of relationship marketing that enables a selling firm to achieve customer's loyalty and increased sales. Particularly research on RQ in pharmaceutical setting has provide the evidence that RQ between representative and physician has a great impact on physician's prescription decision making. I am investigating the notion of relationship quality between pharmaceutical sales representatives and physician's; and I am interested to find the key qualities that a physician likes if a representative needed to build relationship quality with the physician in a Pakistani context as no work has done in this context. However, in practice along with physician's relationship with representative many patient related factors are there that also interplay in physician's prescription decision making. For instance the overall Pakistani patient's economic conditions are not sound and there is poor Governmental healthcare support for the patients. In such a context physicians not only consider their relationship with the representative but also product price and patient's affordability in their prescription decision making. Therefore, I am also investigating the representative-physician relationship quality's interplay or interaction with patient's economic conditions on the outcome as physician decision making. That is how far the brand price a representative promotes can influence the expected outcomes of a representative-physician relationship quality. The study's title is:

**A Critical Evaluation of the Interplay between Relationship Quality and Pricing Mechanisms in Physicians' Prescription Decision Making.**

The conditions under which data are to be collected are as follows:

1. Study participation is on a voluntary basis.
2. No information will be collected in regard to who participated in the study and who did not.
3. Data collection and analysis intends to answer the defined research questions and for achieving the defined objectives of the case study only.
4. Should the combination of collected data allow for the identification of individual study participants, this information will be kept confidential and will not be taken into consideration when analyzing the data.
5. All data will be collected and analyzed through Mr. Sohail Khan only.
6. There will be no disclosure of data.
7. All data collected will be kept only until the point the study results are submitted as a doctoral thesis to the University of Gloucestershire (UK) and the thesis is marked as "passed".
8. Study participation can be interrupted or cancelled at any time without statement of reasons. In this case, the collected data will not be used but deleted.

**Invitation to study participation**

I would like to invite you to take part in this research study and provide me the honour to take your valuable interview. As you have a field experience of many years and keep the relevant knowledge that will help me to better understands the issues I wanted to investigate.

The study can only be successful when sufficiently supported by study participants. I would be happy if you could support my study by participating in the following measures of data collection:

Data collection by interview	<input type="checkbox"/>
------------------------------	--------------------------

**Confirmation of having been informed concerning the research study**

<i>I hereby confirm that I was informed regarding the case study through the following measures:</i>	
Information meeting	<input type="checkbox"/>
Others (please specify) _____	<input type="checkbox"/>

*I agree to participate in the research study.*

*I confirm that I was sufficiently informed about the research through the above measures and that I was given the chance to ask and clarify questions.*

*I am aware of the facts that my participation in this research study is voluntary and that participation can be interrupted and / or cancelled at any time without statement of reasons, and that withdrawing from the study will not result in any negative consequences for me.*

*I understand that the data collected through this research study are recorded and stored safely in anonymous form and that the data is analyzed by Mr. Sohail Khan for the purpose of this research.*

---

Participant name

---

Date

---

Signature

## Appendix-2

### Interview Schedule for first phase data generation:

#### RQ

- 1) How would you describe the importance of your relationship with a PSR in your choice of pharmaceutical products?
- 2) In your opinion when a PSR can achieve strong relationships with you?

**Prompts:** - In your opinion, how important are your trust in, satisfaction and commitment with PSR?

- a) What role does trust play in the relationship between you and PSR?
- b) Can you talk me through how your satisfaction with a PSR affects your relationship with the PSR?
- c) Can you tell me what role does your trust in and satisfaction with a PSR can play in gaining your commitment with PSR?

#### RQ Determinants:

- 4) What factors do you think are vital to helping a PSR develop a strong relationship with the you?

#### Prompts:

- a) In your opinion what is the role of a firm's image in a PSR building strong relationships with you?

Prompt: - How would you describe the characteristics of a firm that has a good image?

- Why do you think that the image of a firm that a PSR represents affects his/or her relationship with you?

- b) Can you talk me through the role that product quality can play in developing strong relationships with you?

Prompt: - How would you describe the characteristics of a good product quality?

- Why do you think that the product quality that a PSR promotes helps to achieve strong relationship with you?

- c) How important do you consider the PSR's visits to you in building a strong relationship?

Prompt: - In your opinion what PSR visit frequency and visit timing is appropriate to facilitate developing strong relationship with physician and why?

- What affect does visit frequency play in shaping strong relationship?

- d) Can you talk me through what role investments like samples, gifts, dinners, educational scholarships to the physician can play in shaping a PSR relationship with a physician?

Prompt: - Can you describe what investment is valued most? by you and why?

e) In your opinion how important is the PSR's ethical selling behaviour (such as not exaggerating his product characteristics or undermining the competitor's products) during sales calls to you?

Prompt: - What affect does a PSR's ethical sales behaviour play in the development of strong relationship with the physician?

f) Can you talk me through what is the importance of a PSR's product knowledge in develop strong relationships?

Prompt: - How does a PSR's product knowledge play a role in development of strong relationships with physicians?

8) Do you want to add any other factors that a PSR needs to develop strong relationship with physicians?

### **RQ OUTCOMES:**

5) Does a PSR having strong quality relationship with you helps him to gain your more prescriptions as an outcome?

5a) Why does a PSR having strong quality relationship with you helps him to gain your more prescriptions as an outcome?

Prompt: a) Think about a PSR with whom you have strong relationship. How frequently you prescribe the PSR's product?

b) Why does you behave in that way?

6) In your opinion under what situations you do not prescribe the PSR's products (even though you have a strong relationship with the PSR and can prescribe the product indication wise to treat the patient's ailment)?

Prompt: a) Does the price of the PSR's product in relation to the patient's affluence lessen the effect of your strong relationship with PSR?

b) How and why does higher product price in relation to the patient's affluence cause a change in your prescription behaviour?

c) Do you hold more favourable attitude for the patient as compared to the PSR with whom you have a strong relationship?

d) Why you prefer your relationship with the patient over a PSR?

7) Can you describe when a PSR's strong relationship with you works more given the patient's circumstances?

8) Do you want to add any other aspect with respect to PSR's strong relationship with physician and on its outcomes?

## Appendix-3

### Interview schedule for second phase data generation:

- 1). How important do you consider your strong relationships with PSR in your prescription decision making?
- 2). Why do you consider your relationships with the PSR in your prescription decision making?

#### **Prompts**

- 2a). How important is yours justification and rationale that leads to your prescription of the PSR's brand as it provides relief to your patient?
  - 2b). What is the role of your feelings or sentiment engendered due to the PSR's efforts, services and trust in his or her benevolence?
- 3). How would you decide a medicine for the patient who cannot afford the one you want to prescribe on the basis of your strong relationship with the PSR and his or her product's efficacy?

#### **Prompts**

- 4). If you do not prescribe, why you do so?
  - 4a). How would your beneficence approach plays a role that leads you to switch onto the other medicine according to the patient's affluence?
  - 4b). How would your sentiments of empathy for the patient's non-affluence function; Why would you favour your sentiments towards patient as compare to the PSR?
  - 4c). How would your preference of practice viability (i.e. patients retention) works in this regard?
- 5). How would you deal with your concerns about the efficacy of the lower price brand as compare to the PSR's higher price brand's efficacy on which you trust?
- 6). How would you manage your strong relationships with the PSR? or

#### **Prompts:**

- 6a). Why would you prefer to wait for the right patient to whom you can prescribe?
  - 6b). Why would you behave in such a way; does it because of your positive sentiments about the PSR's efforts?
- 7). How would you favour the PSR's product if it is less expensive on the basis of your strong relationships?
  - 8). How would you behave when PSR's product is less expensive and you do not hold the strong relationships?

**Appendix-4 Interview dates and Length:**

**a) Phase-one Interviews**

**PSMs**

<b>Interviewee Group-Number</b>	<b>Interview Date</b>	<b>Length of Interview</b>
PSM-1	02-04-2016	122 minutes
PSM-2	03-04-2016	106 minutes
PSM-3	09-04-2016	83 minutes
PSM-4	15-04-2016	103 minutes
PSM-5	18-04-2016	81 minutes
<b>Average Interview Length 99 minutes</b>		

**Physicians**

<b>Interviewee Group-Number</b>	<b>Interview Date</b>	<b>Length of Interview</b>
GP-1	12-06-2016	43:56 minutes
GP-2	16-06-2016	53:57 minutes
GP-3	16-06-2016	30:39 minutes
<b>Average Interview Length 43 minutes</b>		

**b) Phase-two Interviews**

**Urban Area Physicians**

<b>Interviewee Group-Number</b>	<b>Interview Date</b>	<b>Length of Interview</b>
UGP-1	17-06-2016	41 minutes
UGP-2	21-06-2016	30 minutes
UGP-3	27-06-2016	34 minutes
UGP-4	28-06-2016	31 minutes
UGP-5	05-07-2016	35 minutes
UGP-6	07-07-2016	30 minutes
UGP-7	08-07-2016	28 minutes
<b>Average Interview Length 33 minutes</b>		

**Rural Area Physicians**

<b>Interviewee Group-Number</b>	<b>Interview Date</b>	<b>Length of Interview</b>
RGP-1	18-06-2016	33 minutes
RGP-2	24-06-2016	43 minutes
RGP-3	24-06-2016	88 minutes
RGP-4	03-07-2016	40 minutes
RGP-5	04-07-2016	34 minutes
RGP-6	07-07-2016	100 minutes
RGP-7	08-07-2016	38 minutes
<b>Average Interview Length 54 minutes</b>		

**Appendix-5: Final Categories, sub-categories and codes for phase-one data analysis:**

Theme		Categories	Sub-Categories	Codes
<b>RQ Determinants</b>	<b>Firm-Related RQ Determinants</b>	<b>Firm Image (FI)</b>		FRD-FI FRD-FI-F-age FRD-FI-PSR-ExPK FRD-FI-due to Commit FRD-FI-due to PQ FRD-FI-due to Medu
		<b>Product</b>	<b>Product Quality (PQ)</b>	FRD-PQ FRD-PQ-Compliance FRD-PQ-Packaging FRD-PQ-Patient Welfare Context=competition Barr-RQ00-PQ Barr-RQ00-P-side-effects Barr-RQ00-out-dated-Prod
			<b>Product Price (PPR)</b>	FRD-PPR
	<b>PSR's Related RQ Determinants</b>	<b>PSR's Visit Frequency (VF)</b>		PSR-VF PSR-VF-ASB PSR-VF-Less-Busy-Time PSR-VF-Phy-felt obliged PSR-VF-for Chamber Presence PSR-VF-for information-services PSR-VF-for recognition PSR-VF-for reminder
		<b>Appearance (Appr)</b>		PSR-Appr-Enthusiasm PSR-Appr-Drs
		<b>Flexible Responses to Varied Situations (ASB)</b>		PSR-ASB PSR-ASB-Detailing PSR-ASB-Postman Call PSR-ASB-VF and Time Context=competition
		<b>Communication (Communication)</b>		PSR-Communication PSR-Communication-Eng PSR-Communication-ExPK PSR-Communication-Humor PSR-Communication-Non-verb PSR-Presentation
		<b>Product Knowledge (ExPK)</b>		PSR-ExPK
		<b>Ethical Selling Behaviour (ESB)</b>		PSR-ESB PSR-ESB-Avoid False Claims PSR-ESB-Inform Side Effects and Contra Indication PSR-ESB-Leave-negativity and discuss pat-benefit
		<b>Relationship Investments (RI)</b>	<b>Generalized Services</b>	PSR-RI-Services PSR-RI-Services for Phy-time for socialization
			<b>Personalized Services</b>	PSR-RI-Pservices

**Appendix-5: Final Categories, sub-categories and codes for phase-one data analysis (Continued):**

Theme	Sub-theme	Categories	Sub-Categories	Codes
<b>RQ Dimensions</b>		<b>Trust (Trust)</b>	<b>Cognitive and Affective Trust</b>	Trust=Phy-trust-PSR Trust=Openness and uncertainty Removal Trust=PSR's Sincerity Trust=PSR's commitment fulfilment Trust=FRD-FI-Phy-trust-PSR-FI Trust=Phy-Aff-trust-PSR-VF-LBT Trust=Phy-trust-PSR-VF Trust=Phy-Aff-trust-PSR-ASB Trust=Phy-trust-PSR-ASB Trust=Phy-trust-PSR-App and dress Trust=Phy-trust-PSR-communication Trust=Phy-trust-PSR-ESB Trust=Phy-trust-PSR-ExPK Trust=Phy-trust-PSR-PQ Trust=Phy-trust-PSR-RI-Services Trust=Phy-trust-PSR-P-services
		<b>Satisfaction (satisfaction)</b>		Satisfaction=Phy-satis-PSR Satisfaction=Phy-commitment Fulfilment Satisfaction=Phy-satis-PSR-VF Satisfaction=Phy-satis-PSR-ASB Satisfaction=Phy-satis-PSR-Appr and Dress Satisfaction=Phy-satis-PSR-communication Satisfaction=Phy-satis-PSR-ESB Satisfaction=Phy-satis-PSR-ExPK Satisfaction=Phy-satis-PSR-FI Satisfaction=Phy-satis-PSR-PQ Satisfaction=Phy-satis-PSR-RI-Pservices Satisfaction=Phy-satis-PSR-RI-services
		<b>Commitment (Commitment)</b>	<b>Calculative and Affective Commitment</b>	Commitment=Phy-Commitment-PSR-trust Commitment=Phy-Commitment-PSR-satis Commitment=Phy-C-Commitment Commitment=Phy-C-commitment-PSR-Services Commitment=Phy-A-Commitment-PSR-Pserv Commitment=Phy-VerbCommit-Moral bounding Commitment=Phy-A-Commitment-PSR-VF Commitment=Phy-Commitment-PSR-VF Commitment=Phy-Commitment-PSR-PQ Commitment=RQOO-Sales

**Appendix-5: Final Categories, sub-categories and codes for phase-one data analysis (continued):**

<b>Theme</b>	<b>Sub-themes</b>	<b>Categories</b>	<b>Sub-Categories</b>	<b>Codes</b>
<b>RQ Outcomes</b>	<b>Subjective Outcomes</b>	<b>Recognition</b>		RQSO-Phy-intentions-Rx RQSO-PSR Recognition
		<b>Time and Priority</b>		RQSO-Bar-for-compi RQSO-Phy-P-List RQSO-Phy-share-Pinf RQSO-Time RQSO-PSR Priority over the other PSRs RQSO-spec-treatment
	<b>Objective or Actual Outcomes as Physician's PDM</b>	<b>Expected increase in sales or prescription share</b>		RQOO-Freq-RXs RQOO-Sales
		<b>Expected Prescription DM When Product Price is High</b>		Barr-RQOO-HPPR Barr-RQOO-Phy-Reserv-HPPR RQOO-HPPR=affording PAT HPPR-CritC RQOO-HPPR=LowRxs RQOO-LPPR=HighRX Barr-RQOO-Pat-EconC and Aford Barr-Pat-eco=HPPR-switch-LPPR LPPR-EF-clinic-exp LPPR-no-RQ Pat-afford-RQOO Practice viability Pat-is-Priority Pat-Phy-customer Pat-satis Patient-Phy-earnings Phy-Empathy-PAT Phy-Semp-Pat

<b>Miscellaneous Codes on Context (Context)</b>	Context-Competition Context-Patient's EcoC Context-Why RQ is Required
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**Appendix-6: Final Categories, sub-categories and codes for phase-two data analysis:**

<b>Theme</b>	<b>Sub-themes</b>	<b>Categories</b>	<b>Sub-Categories</b>	<b>Codes</b>
<b>RQ Objective Outcomes As Physicians' Prescription Decision Making (Prescription for PSR's Product or Switch for Alternative)</b>	<b>PSR's-Physician RQ</b>			RQ developing determinants FI and PQ PSR's PQ PSR's VF PSR's RI PSR's P-services PSR's ASB PSR's appearance PSR's Communication PSR's ESB PSR's ExPK Phy-Recog-PSR's efforts Phy-technical-need-fulfilment Mech-Phy-sintrest-PSR Mech-efficacy Phy-Recog-PSR's-Mech Emo Phy-social-needs-fulfilment Mech-emotional-PSR Mech-emotional-PSR-VF Mech-Reciprocity-PSR RQSO Product-Price Price and RQ interaction RQOO=Rx when price is competitive RQ+HPPR+Critical Cond+PQ=RX RQ+HPPR+Pat-counciling+PQ=RX RQ+HPPR=No RX RQ+HPPR=RX for affording class RQ+HPPR=Switch
	<b>Patients' Economic Conditions</b>			Patient's economic cond Phys sensitivity of P-Econd Pat-eco-benefit Mech-Affordability Mech-Patient's Affordability
	<b>Patient-Physician Relationship</b>	Physicians' Professional Ethics		Phy-Prof-ethics Mech Patient's wellbeing RX-DM=Quality and Economy RX-DM=Patient's w-being and econo-benefit
			Physician's Humanity, empathy and sympathies	Phy-Humanity Phy-Sympathies Phys-Empathy Humanity, empathy, symp-Mech-emotional
		Patients' Satisfaction & Practice Viability	Competition within Physician's Practices	Patient's Satisfaction Patient is Priority Practice Viability Patient's-Recovery-Practice-Viability Mech-Self-interest-P-retention
			Physician's awareness of pharmacies behaviour	RQ+HPPR=RX dishonour
			Patients Adoption of other routes of treatment	Patient's switch to Quack or Hakim Pat-switch-spiritual treatment P-viability due to economy P-viability with patient's satisfaction
	<b>Physician's Interaction with other Firms' PSRs &amp; Exposure of Alternatives</b>			Price exposure-MNC and Nat-firms LPPR-efficacy doubt Efficacy-doubt-clinical-exp Mech-clinical-exp

## Appendix-7: Example Excerpts of Atlas ti Phase-1 interview:

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Project Edit Documents Quotations Codes Memos Networks Analysis Tools Views Windows Help

P-2: 2. PSM2.docx (73) Quotes Codes Barr-Pat-eco=HPPR-switch-LPPR (3-4) Memos

P 2: 2. PSM2.docx

are with you and we ..... دکھاتا ہے ہوتے ہیں کہ.....

"are sincere to you" اسکو آپ کو اپنے پاس رکھنا ہوتا ہے اور ایک کامیاب سٹریٹجی میں ذہنی ہوتا ہے کہ جتنے اس کے پاس اس کے پرسنل ریلیشنز کے ذمہ ہوں۔ تو اسی ریلیشنز بہت ضروری ہوتے ہیں۔ شروع میں یہ پرسنل ریلیشنز ہوتے ہیں کیونکہ آپ کے ڈاکٹر کے ساتھ اور ڈاکٹر کے ساتھ مفادات ہیں تو آپ مل رہے ہیں ڈاکٹر کی کھیلنے کے ساتھ آپ کے پرائیکٹس مل رہے ہوتے ہیں تو وہ آپ کے ساتھ تعاون کر رہا ہوتا ہے لیکن کچھ وقت گزرنے کے بعد یہ پرسنل ریلیشنز میں بھی تبدیلی ہو جاتی ہے لیکن 95% پرسنل ریلیشنز ہی رہتے ہیں۔

سوال: تو اگر ایک رپ نے ڈاکٹر کے ساتھ سٹریٹجی بنانے میں اس کیلئے کوئی ایسے فیکٹرز درکار ہیں جس سے کہ ایک مطلوبہ ریلیشن بن جائے؟

جواب:

"This human psyche that how we treat our customer"

آپ کے سٹریٹجی میں انسان ہیں اور آپ پھر اس کو کس طرح سے لیکر لیتے ہیں۔ تو کچھ چیزیں میرے تجربہ میں جو ہے ان میں ایک تو "Consistency is very important" کہ آپ جس کے پاس جا رہے ہیں آپ کتنے consistent ہیں۔ آپ کتنے ہائیم کے بعد اس کو مل رہے ہیں کیونکہ ہائیم بہت اہم ہے آپ ہفتے کے بعد ایک مہینہ کے بعد جا رہے ہیں تو آپ کس طرح سے اسکو لیتے ہیں۔ پھر جو آپ کے پاس کروپ ہے پر ڈاکٹر کا وہ بھی اہم ہے کہ جس سٹریٹجی آپ جا رہے ہیں اس کو آپ کے پرائیکٹس کی ضرورت بھی ہے کہ نہیں ہے۔ اگر تو اس ضرورت ہے تو "he might be your customer in future and he will come into your list" پھر یہ کہ جو رپ ڈاکٹر کے پاس جا رہا ہے اس کا اپنا مایہ کیا ہے وہ اپنے آپ کو کس طرح سے ڈاکٹر کے سامنے پیش کر رہا ہے اس کی پرسنل ریلیشنز کیسی ہے۔ کیونکہ " when you go to your customer, you are portraying yourself to your customer, you have to sell yourself first" تو کامیاب وہی ہوتا ہے جو اپنے آپ کو اپنی پرسنل مایہ کو پیش کرتا ہے۔ عموماً یہ ہوتا ہے کہ رپیں جا رہے ہوتے ہیں رف اینڈ ڈیف اسٹائل میں تو یہ آپ کے customer relationship development delay ہوتے ہیں اس کی وجہ سے بتنا آپ بہتر get اپ میں جا رہے ہوتے ہیں اپنا professional attitude لیکر جا رہے ہوتے ہیں آتا جلدی آپ سٹریٹجی لیتے ہیں۔ تیسرا اب آپ نے اپنا سٹریٹجی لیا ہے آپ کے پرائیکٹس اس سے بچھ کر گئے ہیں آپ کی consistency proper ہو گئی ہے اب آپ نے اس کی habit develop کرنے سے کہ وہ prescribe کرے آپ نے اس کی need develop کرنے سے جب تک سٹریٹجی کو جانے نہیں آپ کی کھنکی کے پرائیکٹس کو نہیں جانے چاہو وہ آپ کی بات سنے گا یہی نہیں بالکل۔ اگر وہ آپ کو سنا شروع ہو گیا تو اس کا مطلب یہ ہے کہ "has developed a soft corner for yourself" اب ڈیولپ ہو گیا تو آپ کا سٹریٹجی کی بات بھی سنے گا۔ پھر آپ اسکو بتائیں گے کیا ضرورت ہے اور یہ یہ آپ نے میری ضرورت پوری کرنے سے اب آپ نے اپنا پرائیکٹ ڈاکٹر کا آئیڈیا یا اسکو sold کر دیا اب آئیڈیا بھی sold ہو گیا لیکن ابھی 100% نہیں ہو اسکے ڈاکٹر آپ کی پروڈکٹ کھنڈ کر دے تو پھر مزید دیکھیں گے ڈاکٹر کا مینڈیٹ کیا ہے کونسی مارکیٹنگ ایکٹیویٹی وہ پرنڈ کرے گا کہ "He wants some CMEs or He wants the clinical activity" بتنا کہ آپ اس کی ریکورڈ منٹ کو پورا کرتے جائے گا اتنا ہی آپ کا ہو گا

ہر حال کچھ سٹریٹجی بھی ہوتے ہیں کہ آپ اس کو وٹس کریں اور ان کے ساتھ اچھے رہیں تو

" They will favour you, They will develop relation with you and they will honour their relationships with you"

یہ میرے خیال میں بنیادی چیزیں ہیں جو کہ بہت ضروری ہیں اس کے بعد مزید یہ ہے کہ آپ اپنے ڈاکٹر کو کتنا کثیر کرتے ہیں بتنا آپ اسکو نہیں ملے گا آپ کو فیور کرے گا۔ اب پہلے کی طرح نہیں ہے کہ آپ رپیں رپ اینڈ ڈاکٹر دے اور ڈاکٹر آپ کی پروڈکٹ کھنڈ شروع کر دے

Now you will have to go for some additional activities otherwise Doctors will not stay with you, so you have to go for some clinical activities, some patients' benefit activities or do some CMEs for

P 2: 2. PSM2.docx -> My Library

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## Appendix-7: Example Excerpt of Atlas ti Phase-2 interview:

Rural Physicians - ATLAS.ti

Project Edit Documents Quotations Codes Memos Networks Analysis Tools Views Windows Help

P: Docs P 6: RGP-6 (34) Quotes efficacy-doubt-clinical exp (5-0) Memos

P 6: RGP-6

سوال۔ سر میرا پہلا سوال یہ ہے کہ آپ کے ریپ سے ریلیٹن کنٹارول ادا کرتے ہیں آرائس ڈی ایم میں؟

جواب۔ اصل میں رول کسی حد تک ہے۔ ہمارے ہاں میڈیسن جزک ناموں کے ساتھ تو ہے نہیں سارے کے سارے کرشل ناموں کے ساتھ آتے ہیں۔ پروفٹ کیلگری کی کھنٹی ہیں۔ نیچرلی پھر اس میں ہائی کوالٹی کہتے ہیں۔ جو ایم این ی ہیں پھر بیٹھل کہتے ہیں۔ پھر کچھ لوکل کہتے ہیں۔ ان میں ہر ایک کا کوالٹی کا بھی ڈفرنس ہے۔ اب ایک سہیل انجینئر ہی دیکھ لو۔ یہ ہم سٹیلکس کہتے ہیں۔ انڈس فارما کا اور کارفورن نو سے روپے کا ایلیمیل ہے جو کہ اور بیٹھل ہے۔ بی ٹی نہیں ہے۔ مثلاً جو کوالٹی میں سے اپنی بیٹھل سال کی پرنس میں ایک سیر کیا ہے کہ جہاں گلی پھلکی انجینئر وہاں آپ کی ٹی بھی دے دیتے ہیں۔ وہاں گلی پھلکی انجینئر کو رو جاتی ہیں لیکن جہاں خود ہی بھی سیر سٹنس ہے کہ جہاں ہم کہتے ہیں کہ بیٹھل بہت شہر ہے وہاں ہم وہی سٹیلکس اور جنل کہتے ہیں تو ہمیں خود بھی سٹیلکس نہیں ہوتی۔ تو وہ ڈیڈ کرتا ہے ہم خود بھی بیٹھل پر بیٹھل ہیں۔ بیٹھل کی جیسی بیٹھل ہے ویسے ہی میں نے چاہا ہے۔ اور سٹیلکس اس میں ہے کہوں کہ ریپ میرا دوست ہے میں نے اسی کہتے ہیں کہ بیٹھل ہے۔ بے شک بیٹھل جاتا ہے۔ سوال ہی یہی اٹھتا ہے کہ بیٹھل ہی نہیں ہے۔

سوال نہیں سرجب انکا کھینٹن ہن گئی اور آپ نے براڈ سٹیک کرنا ہے کیونکہ ایک کیلگری میں بہت سارے براڈ ہیں جیسے کہ آپ نے خود بتایا کہ سٹیلکس ہم آپ کے پاس کا فرن سے لیے کہ انڈس فارما تک کی ریش ہے تو اس صورت میں آپ ریلیٹن کو کیسے دیکھتے ہیں۔

جواب۔ اس میں رول اس طرح سے ہوتا ہے میرا فوکس یہی ہوتا ہے کہ ریپ رگولر ڈوٹ کرے اور رگولر ٹاک اپ کرے۔ جو رگولر ٹانگ کرنا ہے تو اس کے آرائس۔ اب ایک بندہ چھ مہینے میرے پاس آئے ہی نہ سوال ہی یہی اٹھتا ہے کہ وہ کسی کہتے ہیں کہ اگر وہ میرے پاس ڈوٹ نہیں کرتا تو اس کی پروفٹ انجینئر نہیں ہوتی۔ ہاں جو بندہ اپنی ڈوٹ فریکوئنسی کو رگولر کھینٹن کرتا ہے تو وہ بیٹھل میں اسے ان کروں گا۔ اس کی پروفٹ ہے کہیں نہ کہیں جگہ جگہ ہوتی تو اسے ضرور آرائس دوں گا۔ جو بندہ آ رہا ہو مجھے اس کی ایک پروفٹ یاد ہے تو نیچرلی میں جس وقت کوئی ایسی ڈیزیز دیکھتا ہوں جس میں اس کی پروفٹ ہوتی ہے تو نیچرلی آئی دل آرائس دیتا۔

سوال۔ تو سر جب ریپ آپ کے پاس رگولر ڈوٹ کرتا ہے تو کیا آپ کو ٹرسٹ ڈیولپ ہو جاتا ہے؟

جواب۔ ٹرسٹ ہوتا ہے، وہ این یوز ڈارگ۔ اب ایک ایسی بائیوٹک کو میں استعمال کروں تو ڈیڈے بہتر کہنے کے بعد بیٹھل خود دے دیتا ہے کہ جی مجھے فرق پڑ گیا ہے۔ پھر پھر سٹیلکس ہو گیا۔ انجینئر سٹیلکس ہوتی ہے۔ پھر ٹرس کے ساتھ نہیں ہوتی ہے۔ پھر ٹرس کے ساتھ نہیں ہوتی ہے۔ ہاں جی چکے کا بناؤ اتر گیا ہے تو بیٹھل ڈوٹ انڈس آف ڈیٹ پارٹیکولر ڈارگ۔ تو وہ آپ کا ٹریڈنگ نہیں کرتی ہے۔ ایسے نہیں کہ جی میرا بیٹھل اس سے اچھا ہو گیا اس کی دوئی میں استعمال کروں۔ دو فہ کی تین ڈھ کی اگر ادا کیٹ ہی نہیں ہو تو آئی دل ٹائٹ آرائس۔

سوال۔ تو سر فرسٹ کنڈیشن تو ہو گئی کے انجینئر ہوتی چاہیے تو کیا سر دور ریپ کہ جس کی پروفٹ کی کوالٹی بہتر ہے آپ کا ٹرسٹ ہو گیا یا پھر ٹرسٹ ریپ پر بھی ہوتا ہے شفت؟

جواب۔ دور ریپ کہ جس کی پروفٹ کی کوالٹی بہتر ہے آپ کا ٹرسٹ لگتی ہوتی ہے۔ دیکھیں نہ ایک ایم این سی ہے اگلی پروفٹ کی کوالٹی ہوتی ہے کیونکہ وہ اپنی بائیوٹک بائیوٹک بائیوٹک اور کوالٹی کنٹرول نہیں ہوتے کسی کو اگر وہ بیٹھل کہتے ہیں تو وہ بھی نوٹس سے کم نہیں بیٹھل۔ سٹیلکس ہم اب جس طرح موٹیلو کاس ہے۔ اس میں گولڈر کی ریزرو برانڈ ہے اب وہ سر جو میں لٹا ہوتی ہے تو وہ سو آٹھ نوے کی تھی اب میرے خیال سے ایک سو نوے سے کی ہے۔ لیکن اب آپ کو مارکیٹ میں ہی نو آئی ہوئی ہیں مثلاً سٹیلکس اور بہت ساری ساری آپ کو اٹھارہ سے تیس روپے کی لارج میں مل جاتی ہیں لیکن ان میں سے بھی کئی کہتے ہیں جن کی انجینئر سے میں مطمئن ہوں اور وہ بہتر ہیں۔ مجھے اب یاد ہے کہ کوئی ٹی این ایلیومون کوئی بہت زیادہ ڈوٹ بیٹھل ہوتی ہے اسے گولڈر کہتے ہیں۔ ورنہ میں نہیں کہتا۔ ایم این سی کے ساتھ ساتھ جو اچھی بیٹھل کہتے ہیں ان کی کوالٹی بہتر ہوتی ہے اور جب ہم خود دیکھتے ہیں کہ میں نے چار پٹے کے لیے ڈوائس کی ہے اور بیٹھل کے سمٹری بھی بہتر ہیں۔ نزلہ بھی نہیں ہوتا ہے اور وہ بیٹھل ہیں تو نیچرلی ایک کا فیڈنس تو ملتا ہے۔

سوال۔ تو سر یہ تو بات ہو گئی ہے کہ انجینئر تو سٹ ہے۔ اس کے علاوہ ریپ کی کوئی کوالٹی آپ دیکھتے ہیں اگر آپ کی گولڈر میں ہے یا آپ سے اچھے ریلیٹن بناتے ہیں۔

جواب۔ بہت اہم رول ہوتا ہے۔ انکا بیوی بہت اہم رول ہے کہتا ہے۔ ہمارے پاس تو بہت آتے ہیں کئی تو ایور فریک ہونے کی کو شش کرتے ہیں مثلاً جسٹ فار انٹھنگ۔ پھر آپ خود ملے ہو یا شروع ہوجاتے ہیں۔ میں دیکھتا ہوں کہ جن کی ایڈو کیٹن اور ٹریڈنگ اچھی ہوتی ہے مثال کے طور پر ایڈوٹ اچھی ٹریڈنگ دیتی ہے اور جب انکا ریپ آتا ہے تو ایک فیڈر بھی ان انجینئر جو کہتے ہیں کہ میں نے ہاں سے ہوتے ہیں ان سے بیٹھل نہیں۔ اور پھر وہ پروفٹ نہیں دیتے ہیں۔ اور وہ بہت اچھی ہوتی ہے۔ ورنہ ہمارے پاس ایسے بھی آتے ہیں جو بس لٹریچر بیٹھل کرتے ہیں کہ سر فیور کیجیے گا۔ اور کئی تو لٹریچر بیٹھل کرتے ہیں۔ انکا لٹریچر پڑا ہوتا ہے انکا بیٹھل نہیں ہوتا۔ لیکن جو ایم این سی انجینئر ہیں۔ یہ اکثر اس پروفٹ کے بارے میں انکا بیٹھل دے دیتے ہیں۔ مثلاً اگر ہم اس پروفٹ کے بارے میں ایڈوٹ بیٹھل یا اس بیٹھل اور بیٹھل کے بارے میں

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## **Appendix-8: Further Representative Quotes:**

Q1. If your firm's image is better then you will save half of the time required to build your relationships with the doctor. And if your firm does not have a good standing in the market or it does not hold a good image then it will be hard for you to develop all these relations. [PSM-2].

Q2. Company is at the back. If a person represents a firm that holds a good image then the doctor offers him more respect and regard. This is because, the company has existed for many years and it takes many years to develop a good image. The company's PSRs have been visiting the doctors for these many years. And whatever they do, either fulfilling their commitment or doing mis-commitments, the reflection of all this will link to any new PSR going from that firm. That is if the firm holds a good image it will help PSR in developing relationships and in achieving commercial benefits. [PSM-4].

Q3. The first three conditions must be met in order to develop strong relationships. These are: the good company image, and its drug should be good in that it should not be an outdated drug. After this, the role of the PSR starts and that matters a lot [GP-2].

Q4. Product quality is above all in terms of its importance for the physician. So without this, nothing is possible. Because, a physician's prime concern is the patient. Physicians' earnings are linked with the patients. And also we are talking about the medicine as many patients come in life-threatening conditions; therefore, a physician cannot take the risk. No matter how much personal interest a physician has, the physician will never take the risk that might lead to a casualty. So, efficacy is a must. [PSM-1].

Q.5. From patient's feedback physician evaluates the impact of the medicine in that, are my patients recovering from disease? So patients' recovery is a measurement gauge and it helps to build physician's trust in the product and without trust, nothing is possible. [PSM-1].

Q.6. Doctor will develop his trust when there is a quality product For example, if a doctor prescribes a product to ten patients and he or she finds positive results in nine patients then this means his or her confidence or trust and satisfaction will be developed in the product. Therefore, you cannot ignore the importance of product quality in the formation of strong relationship between the doctor and PSR [PSM-3].

Q7. If the product quality is not appropriate then the PSR will not able to survive. It may be possible that the doctor prescribes once or twice but if patients do not recover then the doctor will not continue to prescribe. And it is also possible that the doctor tells the PSR...sorry I cannot prescribe your product because it is not giving me the desired results [PSM-4].

Q8. If the patient is satisfied then the physician will develop his trust and satisfaction because the physician is there to serve the patient. And if his patient is not recovering then what is the benefit for him to develop a relationship with the PSR. A physician will only prescribe the product when the patients recover from the disease. And if a patient's trust is shaken then how can a physician develop his or her trust in the product.[PSM-5].

Q9. If the product quality is absent then how can my relationship be developed with the PSR? It cannot be developed. Because my trust in and satisfaction with the product will not develop when my patient is not satisfied as he or she is not recovering [GP-1].

Q.10 When the quality of a product is good, a doctor will not feel hesitation and will not have any doubt that the patient will recover if he prescribes. So if the doctor is confident about the quality of a product then he or she will prescribe [PSM-4].

Q.11. I really dislike PSRs who came to visit at peak times. It gives me the feeling that the PSR is visiting me just for formality and to let their seniors know that he or she is on call by sending them

a text. There is no-doubt that the PSR is visiting; however, I really feel exhausted that the PSR visits me only to fulfil his or her job requirements. And I really dislike those who start over detailing when I am busy dealing with patients in an emergency. In such cases I tell them to come back later [GP-2].

Q.12. In my opinion the best PSR is one who moulds him or herself according to the physician in order to develop strong relationships [PSM-4].

Q.13a Physicians usually know all the family background of the patient; for example, how many kids a patient has or to which economic class he or she belongs. From such assessments physicians develop perceptions about a patient's affordability [PSM-3].

Q.13b. In fact, Pakistan is a developing country and the socio-economic conditions of the patients matters a lot here and therefore, the physician must keep pricing factor in his or her mind with regards to the patients' affordability [PSM-4].

Q.13c. The product should be economical. If the product you are going to prescribe has no economic compliance then the patient will slip away to another physician. Or he or she will take the medicine for a couple of days and then switch physician. This is because; the patient cannot afford the cost of the product. So being a physician I have to see these aspects because I have to take care of my practice as well [GP-2].

Q13d. The relationship with the PSR has its own place, but patient's problem should be sorted out. You have to recover the patient from the disease, and you have to satisfy him or her. That is why a patient is the priority for you [GP-1].

Q13e. As a human you also developed sympathies with the patient because of the pains and the distress he or she is suffering. So whatsoever I can do, I will do, for instance: I do not take my fee, or arrange a free source of the medicine and/or at least convince the patient to take the medicine in order to avoid further serious consequences [GP-3].

Q.14 Definitely, doubt about efficacy is there when you prescribe a low price product. However, I try to choose one from a firm that buys the raw material from where the brand leader buys, this gives me the satisfaction that the patient will recover and I find this works [GP-3].

Q.15. The decision regarding the prescription should be based on merit. The PSR will come in my liking because of his or her hard work and on these basis I have good a good relationship with the PSR. Therefore I will definitely prefer that particular PSR [RGP-2].

Q.16. Buying power of patients living in non-urban areas is much less than compared to urban areas [RGP-5].

Q.17. Therefore being a physician you need to think that whether the patient can buy a product you are going to prescribe, so that you can save his or her life. So, patients' ability to afford has a first priority [RGP-3].

Q.18. Being a professional the most important thing for me is to consider my patients' welfare. It is my responsibility to take care of all their physical, mental and economic conditions [RGP-2].

Q.19. I myself am a son of a poor family and I know what sort of miseries one has to face. For me this is an appropriate way to prescribe a product that a patient can buy and not let the patient go empty handed [RGP-7].

Q.20. For instance, if I myself earn fifty thousand rupees a month and a physician prescribes me fifteen thousand rupees worth medicine for a month, how will I be managed the rest of other household expenses, I cannot afford it [UGP-6].

Q.21. If you make a prescription while considering all aspects i.e. economy, efficacy, standard and the patient's recovery then you do not need to think about the patient's retention. The patient will then automatically be retained [UGP-4].

Q.22. If the PSR's product price is reasonable then I will regularly prescribe it. Because I have a strong relationship with the PSR, as the PSR is knowledgeable, and represents a good quality product of a reputable firm [RGP-1].

Q.23. If you have RQ with the PSR and he or she offers a quality product at a reasonable price, it will be prescribed very frequently [RGP-4]?

Q.24. If there are three or four products offering the same quality and price then definitely I will prescribe a product of a PSR with whom I have RQ. I even prefer his or her product if there is only a small price difference from its competitors [UGP-1].

25. If the PSR's product price is economical then his or her product will be prescribed. This is the PSR's right because his or her product is available in the market at a competitive price and I have friendship with the PSR. Therefore, I have no reason to leave my friend because his or her product meets all the quality and economy requirements [UGP-6]?

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